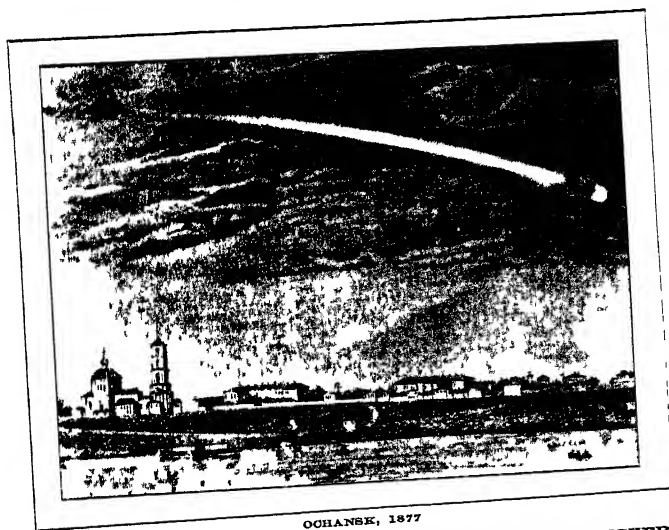




ONE OF SIX LARGEST CASES OF UNIFORM SIZE (Ward-Coonley Collection of Meteorites )

CATALOGUE  
OF THE  
WARD-COONLEY  
COLLECTION  
OF  
METEORITES

BY  
HENRY A. WARD, A M., LL.D.



OGHANSK, 1877

METEORITELLA CADENS, TRANSVOLANS, TRANSCURRENS TRANSVERSA

CHICAGO, 1904

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## PREFACE

The Ward-Coonley collection of meteorites has now so nearly reached its expected limit that the time seems favorable for some notice of its origin and growth, together with a statement of its present contents

The writer of this notice, Mr Henry A Ward, had in the course of travel and business activity been largely interested in several branches of nature, among which were meteorites He made two large collections of these objects, one of which—about 170 falls—formed the basis of the present meteorite collection of the Field Columbian Museum of Chicago The other—some 200 falls—went to enrich the fine Clarence S Bement cabinet of these objects The present collection, which has outstripped them all, was commenced in 1894 with a basis of a few score of choice falls which had been retained from previous transactions For six subsequent years, during which Mr Ward collected actively by purchase and exchange at home and in extensive travel abroad, the collection was so increased that in 1900 its first catalogue was issued, with enumerations and a short description of each of its falls A second list followed in the ensuing year We now (May, 1904) follow with this third catalogue The growth which is thus successively registered is shown in the following table

<b>Catalogue of 1900</b>	<b>424 falls</b>	<b>Weight 1399 Kilogrammes</b>
<b>Catalogue of 1901</b>	<b>511 falls</b>	<b>Weight 1786 Kilogrammes</b>
<b>Catalogue of 1904</b>	<b>603 falls</b>	<b>Weight 2495 Kilogrammes</b>

The increase of growth of the collection in four years of 179 falls, or 45 falls per year, for a collection already numbering 424 falls, is, we believe, unprecedented in the history of meteorite collections

It may be not improper to notice the especial opportunities which enabled the accomplishing of this undertaking How has so great a collection been made? From the first a large outlay of money has been necessary "If one would bring back the wealth of the Indies, one must take the wealth of the Indies with him," is very true in meteorite gathering, as in any other collecting of highly expensive objects At least one-third of all known meteorites are rated when sold in small pieces—which these rarest always are—at from one to five or even more times their weight in gold And very few meteorites except in quite large pieces are rated so low as their weight in silver Thus much money expenditure has been essential But the managers of those half-dozen meteorite collections in the world which have passed the 400 mark are aware that direct money purchase generally quite fails as a means to secure the rarities These must be sought by exchange of equally rare or attractive kinds The museum curator must then take portions (usually small) from his rare kinds to give in exchange for portions (usually alike small) of the rarity which he seeks This matter of exchange becomes thus the base and *vis viva* of nearly all acquisitions of subsequent already known kinds The way in which the maker of the Ward-Coonley collection has applied this force is simple in statement, yet not altogether easy in execution He has sought in a combination of money with extensive travel to continually obtain each year some new kinds which no other collection possessed These he sought in all the continents, wherever there was sure



promise of obtaining them Japan, Java, India, Australia, Persia, Siberia, South Africa, South and Central America have each responded to his quest, yielding him new and precious kinds with which to obtain from other museums meteorite rarities which no money would dislodge, and which were nowhere else obtainable With some of these rarities always with him, he has visited every important meteorite collection in the world, most of them many times over in successive years In all this the power of exchange as a force in building a meteorite collection has been carried to its extreme limit There is a third and final power in such building which for a century past has powerfully aided the great European Museums This is the fact that they have, in periods rarely separated by more than two decades, been the recipients, generally by posthumous gift or purchase, of some large and often celebrated meteorite cabinets The British Museum, Paris, Tubingen, Vienna, Buda-Pesth, Dresden, Berlin, have all been several times thus endowed These sources of growth have been recounted in each edition of their catalogues The Ward-Coonley collection has enjoyed but three such wind-falls One has been the sustaining of the Ward's Natural Science Establishment at Rochester, which has handled meteorites on a prodigious scale, and has during the last ten years joined its powerful efforts with those of the writer In the second place, the collection of the late James R Gregory of London Mr Gregory was a true lover of meteorites, and an ardent collector of them His collection of 406 falls was at the time of his death the largest private meteorite collection in the world This collection was three years ago put into my hands in its entirety, and I was enabled to add its richest treasures to the Ward-Coonley series \* Finally, I was last year enabled to purchase in St Petersburg the entire collection of the late Excellenz Julien de Siemaschko This collection of 402 falls was famous through the Continent of Europe for its comprehensiveness—particularly in the rare Russian and Siberian meteorites The collection, which at the time of its owner's death (1896) was held at the price of 30,000 rubles, was last August purchased by me and added to my collection In these ways, with conditions and antecedents particularly favorable, has the collection noted in this catalogue—The Ward-Coonley Collection—been made

The writer is aware that there is much which is personal in this notice of his own work His apology must be—if the value of the information given is not sufficient—that he has in this enumeration of contents and sources closely followed the plan of the catalogues of the large European collections Only he has, unhappily, no list of donors to record

In placing in the front line *Exchanges* as a means of building up a great museum, the writer would call attention to the easily confirmed and observable fact that those museums which have gone forward and have become great have pursued this course Per contra, the museums of some important institutions—notably in Russia and in Spain—which refuse exchanges have remained stationary The somewhat despairing remark of the curators of such museums has been, "I can do nothing, not even to exchange a single gramme, without first submitting it to the consideration of the Museum Administration They meet a few weeks or months hence" Growth of the museum is thus fatally atrophied, and the curator is left to study out the secret of why he, knowing all about the conditions of his subjects, should be *tied up* by a Board who have not that intimate knowledge, and whose action is thus largely perfunctory when not absolutely obstructive There should be a wider and more liberal distribution of meteorites, both for the sake of science and the more material personal aim of

\* Portions of this great Gregory collection may still be obtained from his son, Mr Victor H Gregory 2 Burlington Gardens, Chiswick, W London, England

increasing each collection thereby. The present collection and that of the Royal Vienna Museum are eminent instances of what may be done in this way. It is pleasant to the writer to recall how, in the building up of the Ward-Coonley collection, several hundred other meteorite collections, public and private, have been at the same time built up. Wulffing (*Die Meteoriten in Sammlungen*) notices the fact that over seven-tenths of all known meteorites are in the hands of half a dozen great museums. But if it be hard to-day to get specimens from them, it is because they are seeking only new falls. As to the propriety of dividing a large meteorite, there will be different decisions according to the individual specimen under consideration. An aerolite, highly orientated and coated all around with a continuous crust, may well be held exempt from division—further than the few grammes essential for analysis and revealing of its inner structure. But such pieces are the great exception. In more than nine-tenths of the cases the stone has broken in the air or on its fall, and not only is not an integer or entire boloid, but is a fractional mass from which other fractions may be taken with absolutely no damage to its scientific value. In this matter the four large (Royal) museums of Europe appear quite in accord. It may not be amiss to repeat here what Wulffing (*loc. cit.*) has said upon the subject:

“Most Meteorites, especially the Irons, would attain a far greater use in a scientific way by being cut into. There are in many collections great masses of iron which have lain there for long decades of years, covered with the same coating of rust which they had when they were first found, and by reason of which their interesting structure can but slightly be recognized. This opinion has been expressed by many meteorite authorities. Partsch (in Vienna Royal Mineral Cabinet, 1843) says ‘Meteorite masses first receive their true scientific interest through attacking and etching.’

“Buchner says (*Pogg. Am.*, Vol. 116, 1862, p. 642) ‘Men may wonder at a lump of meteorite iron on account of its size and weight, but so long as it has not a cut and polished section it hardly exists as an object of study. With preparation, its intrinsic value also increases.’

“Finally, Gustav Rose, as he studied the Berlin collection (*Abh. Berlin Acad.*, 1863) announced ‘I have caused the whole series of stone and of iron meteorites to be cut, and the latter (the irons) to be etched, because only thus can there be obtained an insight to the composition of the first and the structure of the latter.’”—(Wulffing, *Die Meteoriten*, etc., University of Tübingen, 1897, pp. xx and xxi)\*

Dr. Brezina, who by exchanges even more than by purchases built up in a masterful manner the Royal Vienna Museum during his Directorship of twenty years, tells us (*Catalogue* of 1895, p. 236) that of 78 meteorites which he had in a given period of time received, he had “*unlocked* (rendered available to science) 55 of them by cutting them, mostly with many sections, by which means I have obtained a large series of duplicates for other collections (exchanges), also entire series of pieces representing the locality.” On the same page Dr. Brezina reports the acquisition of the Eagle Station Pallasite—“The most beautiful of all meteorites, weighing 36 kilogrammes, of which we have cut up in slices 16 kilogrammes.”

The increase of a meteorite collection beyond about 400 kinds is at the present day so difficult as to be almost impossible. Purchasable kinds have at that mark been almost

\*The writer takes this occasion to express at once his admiration of and his indebtedness to this most comprehensive and useful work. Its list of all meteorites known (in 1897) to science, the indications of where these falls have been scientifically described and where they are now mainly distributed, are invaluable. I say without hesitation and with true pleasure that without the eminent aid of Wulffing's book the Ward-Coonley collection would still be on the stocks.

wholly used up, and exchanges are impracticable with the largest collections, because in most cases the would-be exchanger has nothing new to offer them. Furthermore, the supply of possible material has given out, having found its final resting-place in the great museums, where it cannot be dislodged. Of many meteorites it is known where all is, of the others the part which has disappeared from view is apparently unlikely to be again found. Only the obtaining of new falls, and *all* of the fall, to-day gives material of value for adding any part of the final third to the structure of a world-collection. These are but four—the Vienna collection, the Paris ditto, that of the British Museum and the Ward-Coonley collection. The number of falls of the two latter are known—the British museum (Cat of March, 1904) ~~577~~ falls, and the Ward-Coonley 603 falls. Vienna announced 560 falls in its last Catalogue, October, 1902, while the last Paris catalogue of 1898 announced 466 kinds. It would seem that these four will hold the lead as world-collections for the next one or two decades.

Each has its own factor of value in which it excels. But it probably could easily be shown that the meteorite collection of the Royal Vienna Museum leads all the other three. Professor Klein, the savant Director of the large (450 kinds) Royal Berlin Meteorite Cabinet, after telling us (Cat of 1903) that "this extraordinary increase of our large collection is due to the disposal of large sums received from the general Government," still freely admits (Cat of 1904) that "in Vienna is now displayed the largest of meteorite collections. And it will be hardly possible that any other collection will ever attain to it in educational force, beauty and size of the pieces." This collection is now under the directorship of Prof Friedrich Berwerth, who is enthusiastically increasing its size and excellence. For the present time and until either Vienna or Paris museums issue new catalogues largely in advance of their present ones, the Ward-Coonley collection will bear the palm as to number of falls. As to its further factors of value, we will not speak in this place further than to mention the minor point that we have paid unusual attention to the display of the specimens. The collection is in seven beautiful cases of solid mahogany and plate glass, six of these uniform (12 feet by 4 feet by 7 feet) with the one depicted in the frontispiece, and one, one-third shorter, as shown at the end of this catalogue. The individual specimens, some 1600 in number, are mounted on handsome mahogany pedestals with carved stems, and labels are hand-printed on celluloid plate.

This collection is at present "on deposit" in the Geological Hall on the fourth floor of the American Museum of Natural History, 77th Street and Central Park, West, New York City. Its ultimate destination is undetermined.

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Mr Ward takes this occasion to express his eminent indebtedness to his assistant, Mr Harry L Preston, of Rochester, N Y, who for more than ten years past has done all the mechanical work—notably the cutting, polishing, and etching, of the many thousand specimens involved in making this collection, also the mounting, labelling and listing.

## INTRODUCTION

In accordance with established custom, we call attention in this introduction to features of the contents of the Ward-Coonley Collection. As may be seen on page 105, the geographic sources of the collection are world-wide. Australasia and Asia, Africa and South America are represented each by 95% of all their known meteorites, while North America and Europe bring up the train with 99% of the former and 97% of the latter. No collection in the world can say of itself more than this. Attention is particularly drawn to the series from Japan, Australia, Russia and Mexico. It is only within the last decade that the rare and interesting meteorites from these countries have been largely distributed. To-day it is true that in no collection in any one of these four countries are there so many kinds from that country as are represented in this collection. In Japan we have received powerful aid in exchanges with the Imperial Museum of Ueno, Tokio, in Australia, from the Australian Museum of Sydney, Prof. Edward F. Pittman, the Director of the Geological Survey, Dr. E. H. Sterling of Adelaide, South Australia, and Bernhard H. Woodward of the Perth (West Australia) Museum. In Russia we were given eminent position through the purchase of the Siemaschko Collection. While in Mexico during half a dozen visits we were much aided by Prof. Manuel Villada of the Museo Nacional, and of Prof. Jose C. Aguilera, the Director of the Instituto Geológico and of the Geological Survey. From Prof. W. L. Sclater of the Capetown (South Africa) Museum, and from the Director of the Geological Survey of India, we have had signal aid. It is interesting to note that while in the large series which we have received (by visit and by exchange) from the latter country and from Japan, we have received only two irons—the others being stones—we have in Australia and in Mexico received but two stones each, the others being irons. Much effort has been given in this Catalogue to giving the localities and geographical situation correctly. Our formula of latitude and longitude is based upon that first used by Brezina in the 1885 Catalogue of the Vienna Museum. His determinations for European localities have been largely accepted, while those for other countries—notably for the Western Hemisphere—have been wholly recast or, in the case of later falls, have been estimated for the first time. In recording the American specimens we have ever sought (and have often succeeded) to bring the simple “county” indications down to the exact locality. In some cases this has been the more essential because the name of the county itself has been changed since the meteorite fell, and a meteorite which fell in Macon County may now be Lee County, etc. In other cases the fall may have been so widespread that the county name may better be given. In still other cases we have given a principal point of fall, and have added the words “and vicinity.”

Closely allied to the question of locality is the question of *meteorite names*. There has not as yet been announced—as in Botany and Zoology—a code of nomenclature for meteorites. (It is to be hoped that this will soon be done, before further confusion arises.) The most common and most generally accepted rule for meteorite naming is to give the meteorite the name of the nearest place—town or village. Where this rule is adhered to, the place of fall or find is easily located without looking up the literature of the fall. It is unfortunate that in the first half of the last century, when our geography was less known and the country less

settled, the name of the county was in frequent cases given to the meteorite. Foreigners almost universally adopted this plan when noticing American meteorites, and they still adhere to it to the extent of causing infinite confusion and mistakes. Moreover, the efforts of certain foreign meteorite students—Museum directors—to diversify the names of American meteorites by altering them has also led them—not conversant with our geography—into infinite errors. These, fortunately, have not been perpetuated by being accepted in this country. A multitude of such cases—some of them quite startling—might be instanced.\*

In the maze of synonyms in which all foreign meteorites have been involved by successive writers, I have tried to distinguish and accept those most generally accepted in the large European museums, particularly where these names accord with the rule of identity with locality. It is more than probable that many meteorites now called by separate names belong together. Close topographical contiguity of two stones or irons of general similarity of composition leads to the suspicion that they are of the same fall, even though it does not prove it. A geographical arrangement of a meteorite catalogue, like that of the British Museum, throwing together propinquite kinds, frequently suggests these suspicions. But too little has been done toward showing possible variations of different pieces in an observed fall or in different parts of the same large mass to make the question of distance from each other in those found an entirely safe one in the determination of identity. Brezina has called attention to the two well-observed falls of Jelica (1889, Am) and Guca (1891, C) at a distance of but 30 kilometers from each other. These, while so contiguous topographically, were distinct falls. Conversely, Brezina is disposed to consider Lencz, which fell on the 30th of January, 1868, at the town of that name on the gulf of Spezia, Italy, as being the same as Pultusk, which fell on the same date at Pultusk, in Poland. Another notable and better attested instance of this coincidence in time of distant falls is that of Duruma, which fell in Wanika Land, East Africa, on the 6th of March, 1853, and of Segowlee, which fell *on the same day* in Segowlee, Bengal Presidency, India. We have not undertaken to settle any of these questions of identity or diversity. We have accepted the names which seemed to be of most general acceptance and the most sure to be understood. Nor do we consider it desirable to collect and preserve—as is too often done in meteorite catalogues—the great body of synonyms, several hundred in number, which have been accumulating and clogging meteorite literature for a century past. They have no longer any important value, and should be dropped from the lists.

We have chosen to employ the alphabetic plan in enumerating the specimens of this catalogue. The chronological order has certainly great merit in that it gives all meteorites in the order in which they fell or were found. Among the aerolites, of so large a proportion of which the fall was seen, this manner of presenting them has its evident merits. An order based on the chemical or mineral composition is still more a natural and legitimate one. But for readiness in finding any desired object it is patent that nothing is so easy and so ready in use as is an alphabetical arrangement. In regard to the dates of fall or find of meteorites, there is considerable discrepancy among the various authors as to a small portion of the

\*We have frequently wondered why Glorieta, New Mexico and Trinity County, California, should be so persistently considered abroad as synonymous (See Wülfing, *Die Meteoriten in Sammlungen*, pp. 127, 366). But the whole secret is exposed when we find that Canoncito—a *little cañon* near Glorieta—is noted in the pages of the Vienna Museum Catalogues of 1895 and 1902 as being the same as Canyon City, the well-known synonym of the Trinity County, California, fall. As these places are about 1050 miles apart, as one iron is Om and the other Og, and as one was found in 1875 and the other in 1884, it seems desirable that they should be kept distinct.

whole We have corrected those so far as practicable And the student will be further aided by our notice of the author and place of first description of each specimen Their early notice of the meteorite gives a certain probability to their truest knowledge of the date

We have given the weights of our specimens in two columns The first gives weight of our largest piece, the second the total weight which we possess of the kind We follow usual custom in measuring this weight in grammes, we differ from the majority of catalogues in ignoring any fraction of a gramme \*

As a rule our specimens are of many grammes Indeed, the average of the individual weights of our 603 falls, after eliminating the great masses from the estimate, is, as given on page 105, about 4 pounds—nearly 2 kilogrammes each A collection with so large a number necessarily includes many falls which were of small weight at the outset, and of which only the large museums have specimens, and these perforce very small—of a few grammes each There is here no criticism to be made of the specimen being small, but congratulation on the fall being represented at all In this feature of the size of the individual specimens it is evident that the smaller collections have opportunity for higher average Entire boloids—masses which have not been broken since they reached our earth, and are covered on all sides with the crust—are interesting as showing the treatment of the piece by aerial friction and heat action And the larger they are the greater the surface on which such phenomena are registered We have a few such entire boloids—notably Baratta, weighing 175 pounds and nearly two feet in length, with several much larger non masses In other instances we have specimens showing how small are some entire boloids when they reach our earth after the tribulations of the “middle passage” We have such meteorite integers of the Pultusk, Forest City and Estherville falls, which are but little more than a centimeter in diameter, and weigh but 2 or 3 grammes †

Of some of these abundant showers we have several score of specimens of very different sizes These are of highest interest as showing the breaking up of large masses in an early part of their passage through the air-belt of our planet A single sample—of a few grammes—which we possess of meteoric dust brought by Baron Nordenskiöld from the snow-fields of Northern Finland is of high interest as probably showing the ultimate trituration of meteoric matter ‡ In our large meteorite series are specimens which illustrate the phenomena of pitting, striation and furrowing of their external surfaces both among Aerolites (Baratta, Knyahinya, Tabor, etc) and among Siderites, as Cañon Diablo, Glorieta, Youndegin and others The inner features of the mass, Chondri (Allegan and Bjurbole), Veins (Farmington, Schonberg and Zavid), Breccias resulting from the reunion of distinct mineral or rock fragments (Parnallee, Mezo-Madaras, Fukotomi), and metamorphism analogous to that of our marbles (Tadjera) are shown in a diversity of specimens in this collection Also the different iron structures are brought out in the Widmanstätten figures—octahedral, hexagonal, etc, alloys and inclusions, together with instances of curved lamellae (Glorieta, Toluca),

\*Life is hardly long enough in our estimation to watch the scales in deciding whether one of our meteorites weighs 9170 grammes or 9170 01 grammes! An old catalogue of the British Museum notes its specimen of Rancho de la Pila as weighing 46,512 4 grammes Can they weigh it a second time and get the same fraction?

†The smallest meteorite known, or strongly supposed, to have been a distinct entire fall (not one in a meteorite shower) is the Mühlau Aerolite, which was found at the village of that name near Innsbruck in the Tyrol in 1877 It weighs 5 grammes, and is sacredly preserved in the Royal Vienna Museum

‡The deposits found at the bottom of the ocean by the Government exploring ship Challenger and described by Mr John Murray are thought by him and by the astronomer Proctor to be the submarine equivalent of this meteoric dust, and alike of cosmic origin

faults (Puquios), slickensides (Tennassilm), etc. We have made no enumeration of the score or more of Pseudo-meteorites—fragments of stone or iron purely of terrestrial origin which are from time to time brought forward as true cosmic bodies. These are not unfrequently enumerated in catalogues—even those of the great museums. We consider it a true misfortune that prominence should thus be allowed to the unreal, and that ancient blunders should be given a continued lease of life.

Within the alphabetical arrangement of the meteorites of this catalogue we have chosen the three main divisions first announced by Story-Maskelyne, and still continued in the catalogue of the meteorites of the British Museum—of Siderites, Siderolites, and Aerolites, the former division including all these meteorites whose composition is almost wholly iron, more or less alloyed with nickel. Those in which silicates—notably Olivine, Enstatite and Bronzite—abound, with little or no iron as aerolites, while the siderolites stand as an intermediate group in which there is a mingling of metallic nickel-iron with stony matter. The former of these groups is the most constant in its composition as well as its structure, the latter is the least constantly and sharply defined. We have given to each meteorite fall a letter-symbol indicating its position in a taxonomic classification. The detail of this classification will be found on pages 97-103. It is the latest expression of Dr. Brezina of Vienna on this subject. The system is essentially that published in his catalogue of the Vienna Museum meteorites in 1896, with its groups based on structural peculiarities augmented by some groups newly found or newly determined. Of the former is (12) Leucituranolite, based on the Schafstadt aerolite (fell June, 1891) and lately described by Professor Klein of Berlin, (43) Crystalline Enstatite Chondrite, based on Hvittis, fell 1901, (62 and 65) on the alike new falls of Kodakanal (India) and N'Gourema in the Soudan. Among groups based on new determinations are (27) veined black chondrite—Farmington—separated from black chondrite, (44) Mezosiderites and (45) Grahamite have been separated from each other. The Hexahedrites and the Ataxites have been rearranged according to numerous researches of Cohen and Brezina, and new definitions have been given for them. A number of meteorites have changed their places in the system according to fuller researches on better material—a thing which is likely to continue in the future. It probably can be claimed by no system of meteorite classification that it has further value than a measure of adaptability to bring together falls of generally similar structure and appearances. Analysts and petrographers have still important work to do here. It is to be hoped that they may employ some more natural and less empirical bases for classificatory purposes. We have shown on page 104 how the present collection represents all of Brezina's 74 meteorite groups, with 95% of all the falls.

#### NOTEWORTHY SPECIMENS

Turning over the pages of our catalogue, we find not a few score of meteorites which present points of especial interest. First among the siderites, Arispe—the Sonora Iron of late (1888) discovery—besides its important size, has special interest in its tripartite structure. A section of the mass shows three areas with differently orientated series of kamacite bands showing distinct centers of structural growth. Our main slice is the type specimen of a description of this iron. Another iron from West Africa presents a feature superficially similar which has been the subject of two memoirs by Professors Berwerth and Brezina of Vienna and Professor Cohen of Greifswald. The former describes four distinct areas of

this iron as due to the twinning of a gigantic crystal. Our series of specimens of Cañon Diablo is very large, from small, thin, sharp-edged nuggets to masses of several hundredweight each. The largest mass, weighing 383 kilogrammes, has two holes several inches in diameter passing directly through the mass. Several of the other masses have these holes, which were doubtless once filled with cylindrical nodules of Troilite. Indeed, one most interesting specimen contains the Troilite filling still remaining at the bottom of a half-emptied hole. Sections of the Bella Roca iron, as also the Toluca, show alike large Troilite inclusions, while the Australian Youndegin has the deep concavities and bores quite the counterpart of Cañon Diablo. In like manner are inclusions of Schreibersite profusely present in our slices of Chupaderos and Tombigbee River irons. In the latter, the sulphid shows itself through the mass in zigzag lines strongly suggesting Hebrew characters.

*Ballinoo*, of which we brought the main mass from West Australia, is the only iron which presents two zones of alteration—the outer one shining, the other dull. This and Tazewell, of which latter we have a handsome slab, have the added and most exceptional feature of showing dodecahedral lamellae besides the octahedral ones. There are several pieces of Glorieta, one of them a slice with curved lamellae, a feature which shows better here than in any other meteoric iron. The other is a lengthened mass of flattened cylindrical shape and weighing about 2 kilogrammes, which has upon its lower surface distinct shallow cavities about 1 centimeter in diameter, filled with a pale yellow Olivine. The Puquios iron (first brought by us from Chili) shows a clear *faulting* in some of the kamecite bands. One large slice of Casas Grandes—the great mass of which is in the National Museum at Washington—is a prehistoric iron found in a cave with mummied objects in the State of Chihuahua, Mexico. Other irons in the collection are Charcas, State of Luis Potosi, Mexico, and Victoria on the Saskatchewan River in British America, both of which have been objects of worship by the indigenous people within historical times. The oldest iron, and indeed the oldest well authenticated meteorite, is Elbogen, which was known from early in the fifteenth century. Of this we have a piece, as also of Brannau, which was seen to fall in 1847, and through the study of which Widmanstadt first called attention to the structural figures which have since borne his name. Among siderolites we may notice several unusually large slices of the Brenham Pallasite, with the olivine-filled cells about equaling in volume the iron net-work. Of the Siberian Pallasite Pavlodar (Jamyschewka) we have the largest known piece, with a still larger piece of Marjalahti, a Finland congener which fell two years ago on the west shore of Lake Ladoga. One of the rarest pieces of the collection is a piece weighing one kilogramme of Veramin, a celebrated meteorite in the possession of the Shah of Persia.

Finally, we have a series of nearly fifty pieces varying in size from 5 grammes to 10 pounds of the Estherville, Iowa, meteorite.

#### AEROLITES

Of the aerolites we have among our 333 localities many which are of especial rarity or notable from structural or mineralogical interest. Noticing them alphabetically, Baratta, obtained two years since from the place of its fall in Australia, is the largest piece of its fall and one of the largest of aerolites, being nearly two feet long, and is crusted and pitted over its entire surface. It is also noteworthy from the very different sizes of its abundant chondri. Bjurbole, from Finland, is noteworthy from the great size of its chondri, which are of marked



fibro-crystalline structure and are loose in the matrix. Ensisheim is the oldest of recorded aerolite falls—1492. Eigeo is a brecciated chondrite from the northeastern corner of Africa—Somali Land. Farmington, the second greatest Kansas meteorite, is represented by a large slab in which are well seen the fissures which, as has been suggested by Preston, have been filled at a later period with veins of black molten metallic matter. Hvittis, a Finland meteorite of recent fall, is interesting from its unusual per cent of the mineral Oldhamite. Indarch is the largest and heaviest known piece of this or any other of the limited group of carbonaceous meteorites—a noble crusted mass, weighing over 18 kilogrammes. It is accompanied by all the other members of the group, five in number, including among them a magnificent mass of Mighei, also unique in size. Kesen, a well crusted and deeply pitted meteorite, is interesting as a stone which was given sacred honors for many years in a Buddhist temple. MacKinney, a black chondrite, is a piece of nearly a hundredweight. Of Ness County, Kansas, we have many pieces, all handsomely covered with a thick crust. Of Nobleborough—the rarest American aerolite—we have a large piece, with shining black crust. The Russian diamond-bearing meteorite Novo urei is represented by a handsome specimen. Of Pipe Creek we have the largest mass, weighing nearly 4 kilogrammes. Of the interesting meteorite Saline, we have a noble slice, as well as an outside crust. Professor Farmington, describing this meteorite in Science, notices its structure, a veined spherulitic chondrite, as allied to Werchne Tschirskaya (Russia) and Trenzano (Italy), both of which, like Saline, fell in mid-November on the date of the Leonid star showers. We note further that Bath Furnace, Kentucky, of which we obtained the main mass, is also a veined chondrite and fell on the same date (15th of November) in 1902. Also, of the Russian meteorite Tabory (Ochansk, see cut on title page) we have two masses of several kilogrammes each, one well crusted.

Finally the Lujan, from Buenos Ayres, which is the only recorded instance of an undoubted geological meteorite.

In closing we enumerate thirty meteorite falls—about equally divided between Irons and Stones—of which the largest single piece or part in any museum is now in the Ward-Coonley collection.

SIDERITES		AEROLITES	
	Weight in Grammes		Weight in Grammes
ARISPE	34,442	BARATTA	84,694
BACUBIRITO	1,630	BLUFF	21,707
BALLNOO	11,049	CASTINE	42
CANON DIABLO	1,262,203	INDARCH	20,035
CANYON CITY	4,734	MACKINNEY	51,230
CENTRAL MISSOURI	2,535	MIGHEI	2,357
COSTILLA PEAK	8,544	NESS COUNTY	13,267
ILLINOIS GULCH	830	OAKLEY	8,910
LUIS LOPEZ	3,124	PETERSBURG	224
NEJED	50,233	PIPE CREEK	3,965
ROEBORNE	34,548	RUSHVILLE	23
SAINT GENEVIEVE	106,050		
SURPRISE SPRINGS	1,410	SIDEROLITES	
TONGANOXIE	709	MORRISTOWN	4,259
UTE PASS	120	PAVLODAR	1,414
WILLAMETTE	25,125	VERAMIN	1,037

HENRY A. WARD

## CATALOGUE OF METEORITES.

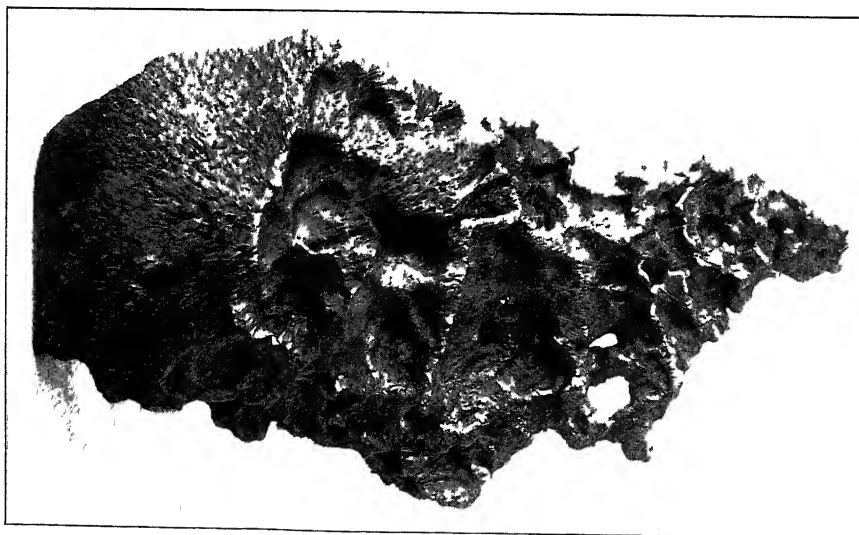
## A. IRON METEORITES: SIDERITES.

CHRONOLOGY OF THOSE SEEN TO FALL

No	Date of Fall	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
1	1751, May 26	<b>HRASCHINA</b> —Medium Octahedrite Om Hraschina (46° 6' N, 16° 20' E*), Agram, Croatia, S W Hungary Described, Gussman, 1785, <i>Lythophylaceum Mitisianum Dissertatione praeuia et observationibus perpetuis physico mineralogicis explicatum a Francisco Gussman Viennae typis Josephi Nobilis de Kurzbeck, 1785, Vol 2, pp 127-131</i>	9	9
2	1835, Aug 1	<b>CHARLOTTE</b> —Fine Octahedrite Of Charlotte (36° 13' N, 87° 20' W), Dickson County, 35 miles west of Nashville, Central Tennessee, U S A Described, Troost, 1845, <i>Am Jour Science, Ser 1, Vol 49, pp 337-340</i>	5	5
3	1847, July 14	<b>BRAUNAU</b> —Normal Hexahedrite H Braunau (50° 36' N, 16° 20' E), Hauptmannsdorf and Ziegelschlag, District of Koniggratz, N E Bohemia Described, Humboldt, 1847 <i>Comptes Rendus, Vol 25, p 627</i>	276	329
4	1870, Jan 23	<b>NEDAGOLLA</b> —Ataxite, Nedagolla Group Dn Nedagolla (17° 35' N, 82° 20' E), 6 miles south of Parvatipur, Vizapatam District, Madras Presidency, India Recorded, Saxton, 1870, <i>Letter in Proc Roy Soc of Bengal, pp 64-65</i>	9	14
5	1876, Apr 20	<b>ROWTON</b> —Medium Octahedrite Om Rowton (52° 48' N, 2° 32' W), 7 miles north of the Wrekin, Wellington, Shropshire, England Described, Flight, 1882, <i>Philos Trans Royal Soc, Vol 3, pp 894-896</i>	13	13

\*Longitude given from Meridian of Greenwich

No	Date of Fall	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
6	1885, Nov 27	<b>MAZAPIL</b> —Medium Octahedrite Om Rancheria de Concepcion (24° 35' N, 102° 15' W), 8 miles east of Mazapil, State of Zacatecas, Mexico Described, Hidden, 1887, Am Jour Science, Ser 3, Vol 33, pp 221-226	20	20
7	1886, Mar 27	<b>CABIN CREEK</b> —Medium Octahedrite Om Six miles east of Lamar (35° 24' N, 93° 17' W), Johnson County, Arkansas U S A Described, Kunz, 1887, Am Jour Science, Ser 3, Vol 33, pp 494-499	2	2
8	1898, Aug 1	<b>QUESA</b> —Fine Octahedrite Of Quesa (39° 0' N, 0° 40' W), District of Enguerra, Province of Valencia, Spain Described, Cohen, 1899, Mittheil, Nat Ver fur Neu-Pom u Rugen, Bd 31, pp 63-66	1	1
9	1900, June 15	<b>N'GOUREMA</b> —Brecciated Oct N'Gourema Group Obzg N'Gourema (12° 20' N, 6° 0' W), 20 miles north of Koakouru, the port of Jenneh on Island of Massina, Province of Massina, Upper Niger, Sudan, Africa Described, Meunier, 1901, Comptes Rendus, Vol 132, No 7, pp 441-442	885	885



N'GOUREMA METEORITE (CAST)

No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Pc ce	Total Weight
			Grammes	
10	1887	<b>ABERT IRON</b> —Medium Octahedrite Om Locality unknown From old collection of Col J J Abert Main mass now in National Mus- eum, Washington, U S A Described, Riggs, 1887, Bull U S Geol Surv , No 42, pp 95-96	49	49
11	1780	<b>ADARGAS</b> (Concepcion)—Medium Octahedrite Om Sierra de las Adargas (26° 6' N, 105° 14' W), nine leagues south of Jimenez, State of Chihuahua, Mexico Described, Bartlett, Personal Narrative of Explor- ations in Texas, New Mexico, California, Sonora, and Chihuahua New York, 1854, Vol 2, p 457	264	375
12	1887	<b>ALGOMA</b> —Medium Octahedrite Om Algoma (44° 30' N, 87° 30' W), Kewaunee County, Wisconsin, U S A Described, Hobbs, 1903, Bull Geol Soc of Am , Vol 14, pp 97-116	10	10
13	1898	<b>ALT BIELA</b> —Fine Octahedrite Of Alt Biela (49° 49' N, 18° 17' W), near Ostrau, Moravia, Austria	19	19
14	1889	<b>AMATES</b> —Medium Octahedrite Om Rancho de los Amates (18° 30' N, 99° 22' W), N of Iguala, State of Guerrero, Mexico Described, Castillo, 1889, Cat Descript des Météorites du Mexique, p 3, Paris, 1889	3	3
15	1889	<b>APOALA</b> —Fine Octahedrite Of Apoala (17° 40' N, 97° 0' W), 10 miles east of Coixtlahuaca, State of Oaxaca, Mexico Main mass (85 kilos) in the Museum of the Insti- tuto Geologico, City of Mexico, not yet described	2182	2182
16	1898	<b>ARISPE</b> —Broadest Octahedrite Ogg Arispe, (30° 15' N 110° 0' W) State of Sonora, Mexico Described, H A Ward, 1902, Proc Rochester Acad Science, Vol 4, pp 79-88	33114	31112
17	1894	<b>ARLINGTON</b> —Medium Octahedrite Om Arlington (44° 30' N, 93° 56' W), Sibley County, Minnesota, U S A Described, Winchell, 1896, The American Geolo- gist, Vol 18, No 5, pp 267-271	94	94
18	1839	<b>ASHEVILLE</b> —Medium Octahedrite Om Baird's Farm (35° 44' N, 82° 30' W), 6 miles N of Asheville, Buncombe County, North Carolina, U S A Described, Shepard, 1839, Am Jour Science, Ser 1, Vol 36, pp 81-85	5	5

WARD-COONLEY COLLECTION OF METEORITES

No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
19	1867	<b>AUBURN</b> —Normal Hexahedrite H Auburn (32° 37' N, 85° 32' W), Lee County (form- erly Macon County), Alabama, U S A Described, Shepard, 1869, Amer Jour Science, Ser 2, Vol 47, pp 230-233	17	17
20	1890	<b>AUGUSTINOWKA</b> —Fine Octahedrite Of Augustinowka (48° 20' N, 35° 0' E), Government Ekaterinoslaw, Southern Russia Described, Alexejew, 1893, Verh russ Min Ges, Vol 2, pp 30 and 470	794	1077
21	1842	<b>BABB'S MILL</b> —Ataxite Babb's Mill Group Db Babb's Mill (36° 18' N, 82° 54' W), 10 miles N of Greenville, Greene County, Tennessee, U S A Described, Troost, 1845, Am Jour Science, Ser 1, Vol 49, pp 342-344	72	89
22	1871	<b>BACUBIRITO</b> —Finest Octahedrite Off El Ranchito (26° 0' N, 107° 54' W), State of Sinaloa, Mexico Described, H A Ward, 1902, Proc Rochester Acad Science, Vol 4, pp 67-74	1502	1630
23	1891	<b>BALD EAGLE</b> —Medium Octahedrite Om Bald Eagle Mountain (41° 12' N, 77° 5' W), 7 miles S of Williamsport, Pennsylvania, U S A Described, Owens, 1892, Am Jour Science, Ser 3, Vol 43, pp 423-424	300	300
24	1892	<b>BALLINOO</b> —Finest Octahedrite Off Ten miles south of Ballinoo (26° 30' S, 116° 30' E), Murchison River, West Australia Described, H A Ward, 1898, Am Jour Science, Ser 4, Vol 5, pp 136-137	8448	11049
25	1855	<b>BARRANCA BLANCA</b> —Brecciated Octahedrite Obz Barranca Blanca (28° 0' S, 69° 10' W), Pass through the Cordilleras from Atacama Desert, Chile, South America Described, Fletcher 1889, Mineralog Magazine, Vol 8, pp 224, 262-263	28	43
26	1897	<b>BEACONSFIELD</b> —Broad Octahedrite Og (Cranbourne) (38° 31' S, 145° 30' E), east of Ber- wick, Mornington, Victoria, Australia Described, Cohen, 1897, Sitzungsber Konigl Preuss Acad der Wissensch, Berlin	815	815
27	1866	<b>BEAR CREEK</b> —Fine Octahedrite Of Aeriotopos (39° 38' N, 105° 16' W), Jefferson County, Colorado, U S A Described, Shepard, Am Jour Science, Ser 2, Vol 42, pp 250, 251	62	62

## SIDERITES

5

No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
28	1888	<b>BELLA ROCA</b> —Fine Octahedrite Of La Belle Roca (24° 55' N, 105° 25' W), Sierra de San Francisco, State of Durango, Mexico Described, Whitfield, 1889, Am Jour Science, Ser 3, Vol 37, pp 439, 440	754	1224
29	1784	<b>BENDEGO</b> —Coarse Octahedrite Og Bendego (10° 20' S, 40° 10' W), Province of Bahia, Brazil Described, Mornay, 1816, Phil Trans, pp 270- 280	735	1678
30	1880	<b>BINGARA</b> —Granular Hexahedrite Ha Bingara (29° 55' S, 151° 35' E), New South Wales, Australia Described, Liversidge, 1880, Jour Roy Soc of New South Wales, Vol 14, pp 308-310	1	1
31	1888	<b>BISCHTUBE</b> —Broad Octahedrite Og Bischtube (49° 40' N, 64° 10' E), Province of Turgai, Western Siberia Described, Kislakovsky, 1890, Bull Soc Imp des Naturalistes de Moscou, Nr 2, pp 187-199	1896	2564
32	1835	<b>BLACK MOUNTAIN</b> —Broad Octahedrite Og Black Mountain (35° 53' N, 80° 3' W), Buncombe County, North Carolina, U S A Described, Shepard, 1847, Am Jour Science, Ser 2, Vol 4, pp 82, 83	7	7
33	1890	<b>BLUE TIER</b> —Medium Octahedrite Om Northeast coast (42° 0' S, 148° 0' E), Tasmania, Australasia Described, Petterd, 1893, Catalogue of Minerals of Tasmania, p 40	9	9
34	1829	<b>BOHUMILITZ</b> —Broad Octahedrite Og Bohumilitz (49° 6' N, 13° 49' E), District of Prachin, Southwest Bohemia Described, Verh Ges d Vaterl Museums v Bohmen, April 3, 1830, p 15	1605	1703
35	1890	<b>BRIDGEWATER</b> —Fine Octahedrite Of Bridgewater Station (35° 45' N, 81° 53' W), Burke County, North Carolina, U S A Described, Kunz 1890, Am Jour Science, Ser 3, Vol 40, pp 320-322	83	83
36	1819	<b>BURLINGTON</b> —Medium Octahedrite Om Cooperstown (42° 40' N, 75° 8' W), Otsego County, New York, U S A Described, Pierce, 1844, Am Jour Science, Ser 1, Vol 46, pp 401-403	62	122

## WARD-COONLEY COLLECTION OF METEORITES

No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
37	1874	<b>BUTLER</b> —Finest Octahedrite Off Butler (38° 18' N, 94° 25' W), Bates County, Missouri, U S A Described, Broadhead, 1875, Am Jour Science, Ser 3, Vol 10, p 401	110	192
38	1867	<b>CACARIA</b> —Octahedrite, Hammond Group Oh Cacaria (24° 28' N, 104° 50' W), north of City of Durango, State of Durango, Mexico Described, Castillo, 1889 Cat Descript des Météorites du Mexique, p 5, Paris, 1889	74	74
39	1818	<b>CAMBRIA</b> —Fine Octahedrite Of Seven miles northwest of Lockport (43° 13' N, 78° 45' W) Niagara County, New York, U S A Described, Sillman, 1845, Am Jour Science, Ser 1, Vol 48, pp 388-392	100	180
40	1783	<b>CAMPO DEL CIELO</b> —Ataxite Socratic Group Ds Qtumpa (27° 40' S, 62° 37' W), Territory of Gran Chaco, Argentine Republic Described, Don Rubin de Celis, 1788, Phil Trans Vol 78, pp 37-42	532	793
41	1891	<b>CAÑON DIABLO</b> —Broad Octahedrite Og Cañon Diablo (35° 10' N, 111° 7' W), Coconino County, Central Arizona, U S A Described, Foote 1891, Am Jour Science Ser 3, Vol 42, pp 413-417	383292	1262203
42	1894	<b>CANTON</b> —Broadest Octahedrite Ogg Cherokee Mills (34° 12' N, 84° 30' W), Cherokee County, Georgia, U S A Described, Howell, 1895, Am Jour Science, Ser 3, Vol 50, p 252	158	310
43	1875	<b>CANYON CITY</b> —Broad Octahedrite Og (Trinity County) (40° 55' N, 123° 5' W) Trinity County, Northern California, U S A Described, Shepard, 1885, Am Jour Science, Ser 3, Vol 29, p 469	4320	4734
44	1793	<b>CAPE OF GOOD HOPE</b> —Ataxite Cape Group Dc (Cape Iron) (34° 40' S, 26° 0' E), Cape Colony, South Africa Described, Barrow, 1801 Account of Travels into the Interior of Southern Africa p 226 Lon- don, 1801	169	225
45	1818	<b>CAPE YORK</b> —Medium Octahedrite Om Fifty miles east of Cape York (76° 12' N, 65° 0' W), Melville Bay, northwest coast of Greenland Described, Peary, 1898, Northward over the Great Ice, Vol 2, Chapter 6, pp 125-155	15	15

No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
46	1869	<b>CAPERR</b> —Medium Octahedrite Om Caperr (45° 15' S, 70° 20' W), Rio Senguer Chubut Province, North Patagonia Described, Fletcher, 1899, Mineralog Mag, Vol 12, No 56 pp 167-170	9	9
47	1887	<b>CARLTON</b> —Finest Octahedrite Off Carlton (31° 50' N, 98° 10' W), Hamilton County, Central Texas, U S A Described, Howell, 1890, Proc Rochester Acad of Science, Vol 1, pp 87-89	2882	5592
48	1844	<b>CARTHAGE</b> —Medium Octahedrite Om (Caney Fork) (36° 20' N, 85° 56' W), Smith County, Tennessee, U S A Described, Troost, 1846, Am Jour Science, Ser 2, Vol 2, pp 356, 357	447	447
49	Prehistoric	<b>CASAS GRANDES</b> —Medium Octahedrite Om Maluntzin (30° 27' N, 107° 48' W), State of Chihuahua, Mexico Described, Tarayre, 1867, Archiv de la Com Sci du Mexique, Vol 3, p 348	6003	8503
50	1877	<b>CASEY COUNTY</b> —Broad Octahedrite Og Casey County (37° 20' N, 84° 55' W), Central Kentucky, U S A Reported, Smith, 1877, Am Jour Science, Ser 3, Vol 14, p 246	22	43
51	1885	<b>CENTRAL MISSOURI</b> —Broadest Octahedrite Ogg Central portion of State of Missouri, U S A Described, Preston, 1900, Am Jour Science, Ser 4, Vol 9, No 52, pp 285, 286	2535	2535
52	1814	<b>CHARCAS</b> —Medium Octahedrite Om Charcas (23° 0' N, 100° 30' W), State of San Luis Potosi, Mexico Described, Sonneschmid, 1804, Mineralog Besch- reibung der vorzuglichsten Bergwerks-Revire in Mexico oder Neuspanien 288	1678	3200
53	1847	<b>CHESTERVILLE</b> —Ataxite Ssatic Group Ds Chester ville (34° 42' S, 81° 15' W), Chester County, South Carolina, U S A. Described, Shepard, 1849, Am Jour Science, Ser 2, Vol 7, pp 449, 450	139	139
54	1901	<b>CHICHIMEGUILAS</b> — Hacienda of Chichimeguilas, State of Zacatecas, Mexico Main mass (6 kilos) in Museum of the Instituto Geologico, City of Mexico Undescribed	20	40



No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
55	1881	<b>CHILCAT</b> —Octahedrite O Chilcoot Inlet (59° 0' N, 135° 15' W) Portage Bay, Southern Alaska Mass in State Mining Bureau, San Francisco, Cali- fornia Recorded, Hanks, 1888, First Annual Report of California State Mining Bureau, p 125	62	62
56	1873	<b>CHULAFINNEE</b> —Medium Octahedrite Om Chulafinnee (33° 35' N, 85° 42' W), Cleburne County, Alabama, U S A Described, Hidden, 1880, Am Jour Science, Ser 3, Vol 19, pp 370-371	88	88
57	1852	<b>CHUPADEROS</b> —Fine Octahedrite Of Rancho de Chupaderos (27° 20' N, 105° 10' W), State of Chihuahua, Mexico Described, Bartlett, 1854 Personal Narrative of Explor in Texas, New Mexico, California, Sonora and Chihuahua New York, 1854, Vol 2, pp 453-458	5467	10832
58	1898	<b>CINCINNATI</b> —Ataxite Sideric Group Ds Found in old collection Cincinnati, U S A Described, Cohen, 1898, Sitzungsber, Konigl Preuss Acad der Wissensch, Berlin, 1898	1	1
59	1860	<b>CLEVELAND</b> —Medium Octahedrite Om (Lea Iron) (35° 8' N, 84° 53' W), Bradley County, Tennessee, U S A Described, Shepard, 1866, Am Jour Science, Ser 2, Vol 43, pp 251	95	171
60	1837	<b>COAHUILA</b> —Normal Hexahedrite H Santa Rosa, Mexico Sancha Estate, Mexico Bonanza, Mexico Bolson de Mapimi, Mexico These four localities are in fact large areas covering together several thousand square miles in the State of Coahuila Over these areas the iron masses exist in wide distribution, and with but partial gathering toward any distant cen- ters The Santa Rosa region alone, which is over one hundred miles in its longest diameter, has furnished many scores of iron fragments, ranging in weight from a few pounds to several hundredweight each Described, Smith, 1855, Am Jour Science, Ser 2, Vol 17, pp 160, 161	1200 163 1253 3428	6044
61	1880	<b>COLFAX</b> —Octahedrite O Near Ellenborough (35° 18' N, 81° 45' W), Ruther- ford County, North Carolina, U S A Described, Eakins, 1890, Am Jour Science, Ser 3, Vol 39, pp 395, 396	42	42

## SIDERITES

9

No	Found Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
62	1860	<b>COOPERTOWN</b> —Medium Octahedrite Om Coopertown (36° 25' N, 87° 0' W), Robertson County, Tennessee, U S A Described, Smith, 1861, Am Jour Science, Ser 2, Vol 31, p 266	68	119
63	1837	<b>COSBY'S CREEK</b> —Broad Octahedrite Og Cosby's Creek (35° 48' N, 83° 15' W), Cocke County, Eastern Tennessee, U S A Described, Troost, 1840, Am Jour Science, Ser 1, Vol 3S, pp 250-254	2881	3044
64	1881	<b>COSTILLA PEAK</b> —Medium Octahedrite Om Costilla Peak (36° 50' N, 105° 13' W), Cimarron Range, Taos, New Mexico, U S A Described, Hills, 1895, Proc Colorado Scientific Soc, p 1	6804	8544
65	1888	<b>COWRA</b> —Finest Octahedrite Off Thirty-five miles southwest of Carcoar (34° 15' S, 148° 58' E), Bathurst District, New South Wales, Australia Described, Card 1897, Records of the Geol Surv of N S W, Vol 5, part 2, p 51	25	32
66	1852	<b>CRANBERRY PLAINS</b> —Octahedrite O Poplar Hill (37° 13' N 80° 47' W), Giles County, South Western Virginia, U S A Recorded, Meunier, 1884, Meteorites, p 116	5	5
67	1854	<b>CRANBOURNE</b> —Broad Octahedrite Og Cranbourne (38° 11' S, 145° 20' E), Mornington County Victoria, Australia Described, Hardinger, 1861, Wien Akad Ber, Vol 43 Abth 2, p 583	2615	2638
68	1872	<b>CUBA</b> —Medium Octahedrite Om Middle portion of Island of Cuba, West Indies Described, Solano y Eulate, 1872, Anales Soc Esp Hist Nat, Vol 1, p 183	3	3
69	1889	<b>CUERNAVACA</b> —Fine Octahedrite Of Cuernavaca (18° 56' N, 99° 10' W), State of Morelos, Mexico Described, H A Ward, 1902, Proc Rochester Acad of Science, Vol 4, pp 81, 82	1424	1764
70	1863	<b>DAKOTA</b> —Broadest Octahedrite Ogg South Dakota, U S A Described, Jackson, 1863, Am Jour Science, Ser 2, Vol 36, pp 259-261	305	305
71	1877	<b>DALTON</b> —Medium Octahedrite Om Twelve miles northeast of Dalton (34° 59' N, 84° 54' W), Whitfield County, Georgia, U S A Described, Smith, 1877, Am Jour Science, Ser 3, Vol 14, p 246	164	290

No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
72	1846	<b>DEEP SPRING</b> —Ataxite Babb's Mill Group Db Deep Springs Farm (36° 20' N, 79° 35' W), Rock- ingham County, North Carolina, U S A Described, Venable, 1890, Am Jour Science, Ser 3, Vol 40, pp 161, 162	671	738
73	1865	<b>DELLYS</b> —Medium Octahedrite Om Dellys (36° 55' N, 4° 0' E), Department of Alger, Algeria North Africa Described, Daubrée, 1866, Comptes Rendus, Vol 62, p 78	2	3
74	1856	<b>DENTON COUNTY</b> —Medium Octahedrite Om Denton County (33° 14' N, 97° S' W), Texas, U S A Described, Shumard, 1860, Trans St Louis Acad of Science, Vol 1, pp 623-629	692	692
75	1780	<b>DESCUBRIDORA</b> —Medium Octahedrite Om Descubridora Range (23° 50' N, 101° 10' W), east of Catorce, District of Catorce, State of San Luis Potosi, Mexico Described, Del Rio, 1804, Tablas Mineralógicas, p 57, Mexico, 1804	28360	33340
	1885	<b>CATORCE</b> —Ten miles west of above Described, Kunz, 1887, Am Jour Science, Ser 3, Vol 33, pp 233-235 Unquestionably belongs with Descubridora	41	41
76	1785	<b>ELBOGEN</b> —Medium Octahedrite Om Elbogen (50° 12' N, 12° 44' E), near Carlsbad, Northwestern Bohemia Described, Neumann, 1812, Gilb Ann, Vol 42, p 197	41	93
77	1893	<b>EL CAPITAN</b> —Medium Octahedrite Om North slope of El Capitan Range (33° 30' N, 105° 30' W), Lincoln County, New Mexico, U S A Described, Howell, 1895, Am Jour Science, Ser 3, Vol 50, pp 253, 254	1611	2099
78	1889	<b>EL TULE</b> —Medium Octahedrite Om Rancho del Tule, Balleza (28° 30' N, 107° 40' W), 100 miles west of Chupaderos, State of Chihua- hua, Mexico Described, Castillo, 1889, Cat Descript des Météorites du Mexique, p 7, Paris, 1889	9	9
79	1854	<b>EMMITSBURG</b> —Medium Octahedrite Om Emmitsburg (39° 43' N, 77° 20' W), Frederick County, West Maryland, U S A Described, Brezina, 1885, Wiener Sammlung, pp 211, 234	21	21

No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
80	1895	<b>FORSYTH COUNTY</b> —Ataxite Nedagolla Group Dn Forsyth County (34° 12' N, 84° 9' W), North Carolina, U S A Described, Brezina, 1895, Wiener Sammlung, p 307	550	550
81	1882	<b>FORT DUNCAN</b> —Normal Hexahedrite H Fort Duncan (28° 35' N 100° 24' W), Maverick County, Southern Texas, U S A Described, Hidden, 1886, Am Jour Science, Ser 3, Vol 32, pp 304-306	434	434
82	1856	<b>FORT PIERRE</b> —Medium Octahedrite Om Twenty miles west of Fort Pierre (44° 23' N, 100° 46' W), Stanley County, South Dakota, U S A Reported, Chouteau, 1858, Trans St Louis Acad of Science, Vol 1, p 307	64	64
83	1890	<b>FRANCEVILLE</b> —Medium Octahedrite Om Franceville (38° 48' N, 104° 35' W), El Paso County, Colorado, U S A Described, Preston, 1902, Proc Rochester Acad of Science, Vol 4, pp 75-78	992	992
84	1866	<b>FRANKFORT</b> —Medium Octahedrite Om Eight miles southwest of Frankfort (38° 7' N, 84° 57' W), Franklin County, Kentucky, U S A Described, Smith, 1870, Am Jour Science, Ser 2, Vol 49, p 331	5	5
85	1884	<b>GLORIETA</b> —Medium Octahedrite Om Near Canoncito (35° 22' N, 105° 50' W), Santa Fe County, New Mexico, U S A Described, Kunz, 1885, Am Jour Science, Ser 3, Vol 30, p 235	1056	4057
86	1883	<b>GRAND RAPIDS</b> —Fine Octahedrite Of Grand Rapids (42° 59' N, 85° 42' W), Walker Township, Kent County, Michigan, U S A Described, Eastman, 1884, Am Jour Science, Ser 3, Vol 28, pp 299, 300	1278	3941
87	1836	<b>GREAT FISH RIVER</b> —Fine Octahedrite Of Graaf Remet (32° 22' S, 24° 33' E), Cape Colony, South Africa Reported, Sir Alexander, 1838, Exp of Discov to Interior of Africa (Countries of Great Namaquas Boschmans, and Hill Damaras), Vol 2, Appd, p 272	11	11
88	1880	<b>GREENBRIER</b> —Broad Octahedrite Og Three miles north of White Sulphur Springs (37° 52' N, 80° 18' W), Greenbrier County, West Virginia, U S A Described, Fletcher, 1887, Mineral Mag, Vol 7, pp 183-186	18	18

## WARD-COONLEY COLLECTION OF METEORITES

No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
89	1827	<b>GROSSLEE</b> —Finest Octahedrite Off Groslee (45° 45' N, 5° 43' E), near Belley, Département de l'Am, France From Damour Collection, Paris	2	2
90	1822	<b>GUILFORD</b> —Medium Octahedrite Om Guilford County (36° 4' N, 79° 48' W), North Carolina, U S A Described, Olmsted, 1822, Am Jour Science, Ser 1, Vol 5, p 262	2	4
91	1884	<b>HAMMOND</b> —Hammond Group Oh Hammond Township (44° 55' N, 92° 22' W), St Croix County, Wisconsin, U S A Described, Fisher, 1887, Am Jour Science, Ser 3, Vol 34, pp 381-383	18	18
92	1888	<b>HANIET EL BEGUEL</b> —Medium Octahedrite Om Seventy miles northwest of Ouaregla (32° 20' N, 5° 0' E), Province of Alger, Algeria, North Africa Described, Daubrée, 1889, Comptes Rendus, Vol 108, pp 930, 931	11	11
93	1890	<b>HASSI JEKNA</b> —Fine Octahedrite Of A few miles east of well of Hassi Jekna (28° 57' N, 0° 31' E), southwest of Province of Alger, Algeria, North Africa Described, Meunier, 1892, Comptes Rendus, Vol 115, pp 531-533	1	1
94	1895	<b>HAYDEN CREEK</b> —Medium Octahedrite Om Hayden Creek (45° 0' N, 113° 45' W), Lemhi County, Idaho U S A Described, Hidden, 1900, Am Jour Science, Ser 4, Vol 9, p 367	42	42
95	1882	<b>HEX RIVER</b> —Normal Hexahedrite H Hex River Mountains (34° 35' S, 19° 30' E), Worcester County, Cape Colony, South Africa Described, Brezina, 1896, Ann d k k Naturh Hofmus, Vol 10, pp 291, 349	248	248
96	1887	<b>HOLLANDS STORE</b> —Granular Hexahedrite Ha Hollands Store (34° 22' N, 85° 26' W), Chattooga County, Georgia, U S A Described, Kunz, 1887, Am Jour Science, Ser 3, Vol 34, pp 471, 472	248	248
97	1889	<b>HOPPER</b> —Octahedrite O Hopper (36° 35' N, 79° 45' W), Henry County, Virginia, U S A Described, Venable, 1890, Am Jour Science, Ser 3, Vol 40, p 162	7	7

No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
98	1897	<b>ILLINOIS GULCH</b> —Ataxite Nedagolla Group Dn Near Ophir (46° 39' N, 112° 32' W), Deer Lodge County, Montana, U S A Described, Cohen, 1900, Sitzungsber der Kon Pr Akad der Wissensch, p 1132, Berlin, 1900	830	830
99	1887	<b>INDIAN VALLEY</b> —Granular Hexahedrite Ha Indian Valley Township (36° 58' N, 80° 39' W), Floyd County, Virginia, U S A Described, Kunz, 1891, Mineralog Mag, Vol 9, N 44, p 394, London, 1891	1906	1906
100	1871	<b>IQUIQUE</b> —Ataxite Cape Group De Ten leagues east of Iquique (21° 45' S, 69° 45' W), Province of Tarapaca, Chili Described, Ramond, 1873, Festschr d Ges nat- forsch Freunde, Berlin, 1873	11	11
101	1898	<b>IREDELL</b> —Normal Hexahedrite H Six miles southwest of Iredell (31° 53' N, 97° 52' W), Bosque County, Central Texas, U S A Described, Foote, 1899, Am Jour Science, Ser 3, Vol 8, p 415, 416	8	8
102	1880	<b>IVANPAH</b> —Medium Octahedrite Om Ivanpah (35° 30' N, 115° 28' W), San Bernardino County, California, U S A Described, Shepard, 1880, Am Jour Science, Ser 3, Vol 19 pp 381, 382	221	221
103	1846	<b>JACKSON COUNTY</b> —Medium Octahedrite Om Jackson County (36° 52' N, 85° 37' W), North- west Tennessee, U S A Described, Troost, 1846, Am Jour Science, Ser 2, Vol 2, p 357.	10	10
104	1885	<b>JAMESTOWN</b> —Fine Octahedrite Of Jamestown (46° 42' N, 98° 34' W), Stutsman County, North Dakota, U S A Described, Huntington, 1890, Proc Amer Acad Arts and Sciences, Vol 25, pp 229-232	583	583
105	1883	<b>JENNYS CREEK</b> —Broad Octahedrite Og Old fork of Jennys Creek (37° 53' N, 82° 22' W), Wayne County, West Virginia, U S A Described, Kunz, 1885, Proc Amer Asso, Vol 34, p 246	7	7
106	1858	<b>JOEL'S IRON</b> —Medium Octahedrite Om Unspecified part of Desert of Atacama, Chili Described, Brezina, 1885, Wiener Sammlung, pp 155, 213, 214, 234	11	27

No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
107	1884	<b>JOE WRIGHT</b> —Medium Octahedrite Om Seven miles east of Batesville (35° 43' N, 91° 27' W), Independence County, Arkansas, U S A Described, Hidden, 1886, School of Mines Quarterly, Vol 7, No 2, Jan, 1886	266	440
108	1866	<b>JUNCAL</b> —Medium Octahedrite Om Juncal (26° 10' S, 69° 3' W), Desert of Atacama, Chili Described, Daubree, 1868, Comptes Rendus, Vol 66, pp 568-571	50	50
109	1887	<b>KENDALL COUNTY</b> —Brecciated Hexahedrite Hb Kendall County (29° 24' N, 98° 30' W), Central Texas, U S A Described, Brezina, 1887, Neue Meteoriten III Ann Hof-Mus, Vol 2, p 115	410	696
110	1889	<b>KENTON COUNTY</b> —Medium Octahedrite Om Eight miles south from Independence (38° 40' N, 84° 29' W), Kenton County, Kentucky, U S A Described, Preston, 1892, Am Jour Science, Ser 3, Vol 44, pp 163, 164	9545	17930
111	1898	<b>KODAIKANAL</b> —Brecciated Octahedrite Ohk Palni Hills (9° 55' N, 78° 0' E), Madura District, Madras Presidency, India Recorded, Berwerth, 1903, Verz der Meteoriten im K K Naturhistorischen Hof-Museum, p 64	128	128
112	1862	<b>KOKOMO</b> —Ataxite Cape Group De Seven miles southeast of Kokomo (40° 34' N, 86° 2' W), Howard County, Indiana, U S A Described Cox, 1873, Am Jour Science, Ser 3, Vol 5, pp 155, 156	40	63
113	1887	<b>KOKSTAD</b> —Medium Octahedrite Om Kokstad (30° 28' S, 29° 27' E), East Griqualand, Cape Colony, South Africa Described, Brezina, 1887, Verh der K K Geol Reichsanstalt, p 289	270	270
114	1828	<b>LA CAILLE</b> —Medium Octahedrite Om South of St Auban (43° 47' N, 6° 43' E), Departement des Alpes Maritimes, France Described, Brard, 1828, Minéralogie, under Article "Fer"	66	108
115	1860	<b>LA GRANGE</b> —Fine Octahedrite Of La Grange (38° 37' N, 85° 25' W), Oldham County, Kentucky, U S A Described, Smith, 1861, Am Jour Science, Ser 2, Vol 31, p 151	33	33

No	Found Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
116	1888	<b>LA PRIMITIVA</b> —Ataxite Nodagolla Group De Salitre (20° 18' S, 69° 35' W), Tarapaca Desert, 40 miles east of Iquique, Chili Described, Howell, 1890 Proc Rochester Acad of Science, Vol 1, p 100	30	30
117	1557	<b>LAURENS</b> —Finest Octahedrite Off Laurens Court-house (34° 30' N, 82° 14' W), Laurens County, South Carolina, U S A Described, Hidden, 1886, School of Mines (Colum- bia College) Quarterly, No 1, Oct 1886	<del>336</del>	<del>680</del>
118	1814	<b>LENARTO</b> —Medium Octahedrite Om Near Bartfeld (49° 18' N, 21° 41' E), Saroser Dis- trict, Galicia, Austria Described, Tebel, 1815, Gilb Ann, Vol 49, pp 181, 182	336	680
119	1880	<b>LEXINGTON COUNTY</b> —Broad Octahedrite Og Lexington County (33° 57' N, 81° 18' W), South Carolina, U S A Described, Shepard, 1881, Am Jour Science, Ser 3, Vol 21, pp 117-119	87	108
120	1879	<b>LICK CREEK</b> —Normal Hexahedrite II Lick Creek (35° 45' N, 80° 12' W), Davidson County, North Carolina, U S A Described, Hidden, 1880, Am Jour Science, Ser 3, Vol 20, pp 323-326	25	40
121	1834	<b>LIME CREEK</b> —Normal Hexahedrite II Near Claiborne (31° 34' N, 87° 30' W), Monroe County, Alabama, U S A Described, Jackson, 1838, Am Jour Science, Ser 1, Vol 34, pp 332-337	94	109
122	1882	<b>LINNVILLE</b> —Ataxite Babb's Mill Group Db Linnville Mountain (35° 40' N, 81° 35' W), Clai- borne, Burke County, North Carolina, U S A Described, Kunz, 1888, Am Jour Science, Ser 3, Vol 34, pp 275-277	28	28
123	1853	<b>LION RIVER</b> —Fine Octahedrite Of <del>Near Bethany</del> (27° 0' S, 17° 30' E), Great Namaqua Land, South Africa Described, Shepard, 1853, Am Jour Science, Ser 2, Vol 15, pp 1-4	215	261
124	1857	<b>LOCUST GROVE</b> —Ataxite Siratik Group Ds Locust Grove (33° 20' N, 84° 8' W), Henry County, Georgia, U S A Described, Brezina, 1895, Wiener Sammlung, 1895, pp 302, 353	227	227



No	Found Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
125	1888	<b>LONACONING</b> —Broad Octahedrite Og Twelve miles south of Lonaconing (39° 28' N, 79° 2' W), Allegheny County, Western Maryland, U S A Described, Foote, 1892, Am Jour Science, Ser 3, Vol 43, p 64	38	38
126	1868	<b>LOSTTOWN</b> —Medium Octahedrite Om Losttown (34° 10' N, 84° 32' W), Cherokee County, Georgia, U S A Described, Shepard, 1864, Am Jour Science, Ser 2, Vol 46, pp 257, 258	76	76
127	1885	<b>LUCKY HILL</b> —Medium Octahedrite Om Lucky Hill (18° 8' N, 77° 50' W), St Elisabeth, Jamaica, W I Recorded, v Hauer, 1886, Ann Hof Mus, Bd 2, p 39	27	49
128	1896	<b>LUIS LOPEZ</b> —Medium Octahedrite Om Five miles southwest of Socorro (34° 0' N, 107° 0' W), Socorro County, New Mexico, U S A Described, Preston, 1900, Am Jour Science, Ser 4, Vol 9, pp 283-285	3124	3124
129	1854	<b>MADOC</b> —Fine Octahedrite Of Madoc Township (44° 29' N, 77° 30' W), Hastings County, Ontario, Canada Described, Hunt, 1855, Am Jour Science, Ser 2, Vol 19, p 417	8	8
130	1840	<b>MAGURA</b> —Broad Octahedrite Og (Arva) (49° 20' N, 19° 29' E), Arva District, Northern Hungary Described, Haidinger, 1844, Wiener Zeitung, 17th April, 1844	845	1366
131	1876	<b>MANTOS BLANCOS</b> —Fine Octahedrite Of Mount Hicks (23° 23' S, 70° 5' W), Atacama Desert, Chili Described, Fletcher, 1889, Mineral Mag, Vol 8, pp 224, 230, 257, 258	8	8
132	1860	<b>MARSHALL COUNTY</b> —Medium Octahedrite Om Marshall County (36° 50' N, 88° 17' W), Kentucky U S A Described, Smith, 1860, Am Jour Science, Ser 2, Vol 30, p 240	17	35
133	1898	<b>MART</b> —Finest Octahedrite Off Mart (31° 10' N, 96° 45' W), McLennan County, Central Texas, U S A Described, Merrill and Stokes, 1900, Proc Wash Acad of Sciences, Vol 2, pp 51-56	1132	1132

## SIDERITES

17

No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
131	1885	<b>MATATIELA</b> —Medium Octahedrite Om Fifteen leagues west-northwest from Kokstad (30° 20' S, 28° 40' E), East Griqualand, Cape Colony, South Africa Described, Cohen, 1900, Annals South African Museum, Vol 2, pp 9-19	27	27
135	1884	<b>MERCEDITAS</b> —Medium Octahedrite Om Ten leagues east of Chanaral (26° 25' S 70° 0' W), Northern Chili Described, Howell, 1890, Proc Rochester Acad of Science, Vol 1 p 99	729	729
136	1804	<b>MISTECA</b> —Medium Octahedrite Om Misteca Alta (16° 45' N, 97° 4' W), State of Oaxaca, Mexico Described, Del Rio, 1804, Tablas Mineralog p 57	260	260
137	1899	<b>MOCTEZUMA</b> —Medium Octahedrite Om Moctezuma (28° 49' N, 109° 40' W), State of Sonora, Mexico Main mass in the collection of the School of Mines, City of Mexico Undescribed	364	364
138	1893	<b>MOORANOPPIN</b> —Broadest Octahedrite Ogg Fifty miles west of Coolgardie (32° 0' S, 119° 25' E), Lansdowne County, West Australia Described H A Ward, 1898, Am Jour Science, Ser 4, Vol 5, p 140	74	74
139	1600	<b>MORITO</b> —Medium Octahedrite Om Hacienda of San Gregorio, State of Chihuahua, Mexico Recorded, Luis Cabrera de Cordova, 1619, His- toria de Felipe Segundo, Rev de España, Lib 13, p 1163, Madrid	14	14
140	1892	<b>MORRADAL</b> —Ataxite Babb's Mill Group Db Morradal, near Grjotlien (61° 50' N, 8° 10' E), Sknaek District, Norway Described, Cohen, 1898, Vidensk Skrifter I Mattem Naturv Klasse, No 7, Christiania, Norway	5	5
141	1887	<b>MOUNT JOY</b> —Broadest Octahedrite Ogg Five miles southeast of Gettysburg (39° 44' N, 77° 20' W), Adams County, Pennsylvania, U S A Described, Howell 1892, Am Jour Science, Ser 4, Vol 41, pp 115, 416	15000	29814
142	1892	<b>MOUNT STIRLING</b> —Broad Octahedrite Og Mount Stirling (31° 58' S, 117° 55' E), 60 miles east of York, West Australia Recorded, Etheridge, Jr., 1897, Records Austra- lian Museum, Vol 3, No 3, p 58	952	952

No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
143	1899	<b>MUKEROP</b> —Finest Octahedrite Off Near Bethany (25° 20' S, 18° 25' E), District of Gibeon, Great Namaqualand, Southwest Africa Described, Brezina and Cohen, 1902, Jahreshefte des Ver. für Vaterl. Naturk. in Württemberg, Jahrg., 1902, Bd. 58, S. 292-302	22560	42560
144	1897	<b>MUNGINDI</b> —Finest Octahedrite Off Three miles north of Mungindi (29° 0' S, 149° 0' E), Southern Queensland, Australia Described, Card, 1897, Rec. Geol. Surv. N. S. Wales, Vol. 3, p. 121	1385	1385
145	1847	<b>MURFREESBORO</b> —Medium Octahedrite Om Murfreesboro (35° 50' N, 86° 20' W), Rutherford County, Central Tennessee, U. S. A. Described, Troost, 1848, Am. Jour. Science, Ser. 2, Vol. 5, pp. 351, 352	46	65
146	1839	<b>MURPHY</b> —Normal Hexahedrite H Murphy (35° 6' N, 84° 2' W), Cherokee County, North Carolina, U. S. A. Described, H. L. Ward, 1899, Am. Jour. Science, Ser. 4, Vol. 8, pp. 225, 226	303	567
147	1890	<b>NAGY-VAZSONY</b> —Medium Octahedrite Om Near Vörös-Bereny (46° 59' N, 17° 41' E), Vesz- prémer Comitát, Western Hungary Described, v. Hauer, 1891, Ann. Hof-Mus., Vol. 6, p. 54	36	36
148	1854	<b>NARRABURRA CREEK</b> —Broadest Octahedrite Ogg Twelve miles east of Temora (34° 10' S, 147° 43' E), New South Wales, Australia Described, Russell, 1890, Jour. Roy. Soc. of N. S. Wales, Vol. 22, p. 81	10	10
149	1863	<b>NEJED</b> —Medium Octahedrite Om Wadee Banee Khaled (24° 15' N, 46° 25' E), Dis- trict of Nejed, Central Arabia Described, Fletcher, 1887, Mineralog. Mag., Vol. 7, pp. 179-182	50204	50233
150	1860	<b>NELSON COUNTY</b> —Broadest Octahedrite Ogg Nelson County (37° 48' N, 85° 27' W), Kentucky, U. S. A. Described, Smith, 1860, Am. Jour. Science, Ser. 2, Vol. 30, p. 240	284	435
151	1872	<b>NENNTMANSDORF</b> —Normal Hexahedrite H Nenntmanskorf (50° 57' N, 13° 57' E), 11 miles southeast of Pirna, Saxony Described, Gemnitz, 1872, Im Dresdener Journal vom 31 December, 1872 (Nr. 303)	22	22

## SIDERITES

19

No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
152	1879	<b>NIAGARA</b> —Broad Octahedrite Og Niagara (47° 58' N, 97° 52' W), Grand Forks County, North Dakota, U S A Described, Preston, 1902, Jour of Geol, Vol 10, No 5, Chicago, 1902	24	24
153	1876	<b>NOCHTUISK</b> —Broad Octahedrite Og Nochtusk (59° 50' N 116° 20' E), Government of Yakutsk, East Siberia	1	1
154	1895	<b>NOCOLECHE</b> —Medium Octahedrite Om Near Wanaaring (29° 35' S, 144° 10' E), forty miles northwest of Bourke, New South Wales Described, Cooksey, 1897, Records Austr Mus, Vol 3 No 3, pp 51-54	1123	1123
155	1863	<b>OBERNKIRCHEN</b> —Fine Octahedrite Of Buckeberg (52° 16' N, 9° 8' E), Westphalia, Cen- tral Prussia Described, Wohler and Wicke, 1863, Gott Gel Anz (Nachr), 1863, pp 364-367	124	185
156	Prehistoric	<b>OCTIBBEHA</b> —Ataxite Babb's Mill Group Db Octibbeha County (33° 28' N, 88° 51' W), Missis- sippi, U S A Described, Taylor, 1857, Proc Phila Acad Nat Sciences, April 1857	1	1
157	1856	<b>ORANGE RIVER</b> —Medium Octahedrite Om Garieb, Orange River, Southwest Africa Described, Shepard, 1856, Am Jour Science, Ser 3, Vol 21, pp 213-216	74	74
158	1893	<b>OROVILLE</b> —Medium Octahedrite Om Oroville (39° 18' N, 122° 38' W), Butte County, Northern California U S A Main mass in Museum of the Academy of Sciences, San Francisco, California Undescribed	315	579
159	1895	<b>OSCURO MOUNTAINS</b> —Broad Octahedrite Og Oscuro Mountains (33° 45' N, 107° 20' W), Socorro County, New Mexico, U S A Described, Hills, 1897, Proc of Colorado Scientific Soc, 1897, pp 1-4	640	640
160	1887	<b>PAN DE AZUCAR</b> —Broad Octahedrite Og Sixty-seven miles inland from Pan de Azucar (26° 0' S, 69° 2' W), Desert of Tarapaca, Chili Recorded, Fletcher, 1896, Introd to Study of Meteorites, p 69, London, 1896	210	210
161	1903	<b>PERSIMMON CREEK</b> —Medium Octahedrite Om Persimmon Creek (35° 6' N, 84° 7' W), Cherokee County, North Carolina, U S A Mass in U S National Museum To be described	132	132

## WARD-COONLEY COLLECTION OF METEORITES

No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
162	1841	<b>PETROPAVLOVSK</b> —Medium Octahedrite Om Petropavlovsk (55° 10' N, 69° 10' E), on Miass River, Government of Akmolinsk, Western Siberia Described Erman, 1841 Arch fur wissensch Kunde v Russland, Vol 1, pp 311-320	46	46
163	1850	<b>PITTSBURG</b> —Broadest Octahedrite Ogg Miller's Run (40° 27' N, 79° 57' W), Allegheny County, Pennsylvania, U S A Described, Silliman, 1850, Proc Amer Asso for 1850, Vol 4, p 37	9	9
164	1893	<b>PLYMOUTH</b> —Medium Octahedrite Om Plymouth (41° 20' N, 86° 18' W), Marshall County, Eastern Indiana, U S A Described, H A Ward, 1895, Am Jour Science, Ser 3, Vol 49, pp 53-55	626	1090
165	1797	<b>PRAMBANAN</b> —Fine Octahedrite Of Prambanan (7° 30' N, 109° 10' E), Soerakarta Residency, Central Java Described, v Baumhauer, 1866, Arch Neerl, Bd 1, pp 465-467	16	16
166	1885	<b>PUQUIOS</b> —Medium Octahedrite Om Puquios (27° 16' S, 69° 48' W), 8 miles east of Copiapo, Chili Described, Howell, 1890, Am Jour Science, Ser 3, Vol 40, pp 224-226	71	132
167	1834	<b>PUTNAM COUNTY</b> —Fine Octahedrite Of Putnam County (33° 16' N, 83° 25' W), Georgia, U S A Described, Willet, 1854, Am Jour Science, Ser 2, Vol 17, pp 331, 332	23	23
168	1894	<b>QUEENSLAND</b> —Broad Octahedrite Og Uncertain locality, South Queensland, Australia Mass in Public Museum, Brisbane, Queensland Undescribed	72	72
169	1886	<b>RAFRUTI</b> —Ataxite Nedagolla Group Dn Rafuti (47° 3' N, 7° 48' E), Emmenthal, Canton of Berne, Switzerland Described, E von Fellenberg, 1900, Centralbl fur Miner Geol u Palcont, pp 152-155	7	7
170	1804	<b>RANCHO DE LA PILA</b> —Medium Octahedrite Om Pila (23° 15' N, 104° 0' W), nine leagues east of Durango, State of Durango, Mexico Described, Del Rio, 1804 Tablas Mineralogicas, Mexico, 1804, p 57	1657	2042
171	1810	<b>RASGATA</b> —Ataxite Siratik Group Ds Rasgata (5° 0' N, 74° 1' W), Province of Boyaca Colombia, South America Described, Mariano de Rivero and Boussingault, 1824, Ann Chim Phys, Vol 25, pp 438-443	112	112

## SIDERITES

21

No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
172	1808	<b>RED RIVER</b> —Medium Octahedrite Oh Cross Timbers, Head-waters of Red River, Texas Described, Bruce, 1810, Mineralog Jour, Vol 1, p 124	32	84
173	1895	<b>REED CITY</b> —Octahedrite Hammond group Om Reed City (43° 53' N, 85° 32' W), Osceola County, Michigan, U S A Described, Preston, 1903, Proc Rochester Acad Science, Vol 4, pp 89-91	1657	1657
174	1901	<b>RHINE VALLEY</b> —Medium Octahedrite Om (Rhine Villa?), South Australia Recorded, Berwerth, 1903, Verzeichniss der Meteoriten im K K Nat Hof-Museum, p 85, Wien, 1903	155	155
175	1850	<b>RODEO</b> —Medium Octahedrite Om Rodeo (25° 20' N, 104° 40' W), State of Durango, Mexico Main mass in Field Columbian Museum, Chicago, Ill, U S A To be described	1500	• 1500
176	1892	<b>ROEBOURNE</b> —Medium Octahedrite Om Twenty miles from Hammersley Range (22° 20' S, 118° 0' E), Northwest Australia Described, H A Ward, 1898, Am Jour Science, Ser 4, Vol 5, pp 135, 136	20734	34548
177	1897	<b>ROSARIO</b> —Broad Octahedrite Og Rosario (14° 38' N, 88° 42' W), Northern Hon- duras Main mass in the Bement Collection Undescribed	461	461
178	1844	<b>RUFF'S MOUNTAIN</b> —Medium Octahedrite Om Ruff's Mountain (34° 15' N, 81° 21' W), Lexington County, South Carolina, U S A Described, Shepard, 1850, Am Jour Science, Ser 2, Vol 10, p 128	118	225
179	1863	<b>RUSSEL GULCH</b> —Fine Octahedrite Of Russel Gulch (39° 47' N, 105° 31' W), Gilpin County, Colorado, U S A Described, Smith, 1866, Am Jour Science, Ser 2, Vol 42, pp 218, 219	277	277
180	1896	<b>SACRAMENTO MOUNTAINS</b> —Medium Octahe- drite Om Sacramento Mountains (32° 32' N, 105° 20' W), Lincoln County, New Mexico, U S A Described, Foote, 1897, Am Jour Science, Ser 4, Vol 3, pp 65, 66	6115	6115

No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
181	1863	<b>SAINT FRANCOIS COUNTY</b> Broad Octahedrite Og Saint Francois County (37° 55' N, 90° 36' W), Southeastern Missouri, U S A Described, Shepard, 1869, Am Jour Science, Ser 2, Vol 47, pp 233, 234	753	753
182	1888	<b>SAINT GENEVIEVE</b> —Fine Octahedrite Of Saint Genevieve County (37° 47' N, 90° 22' W), Southeastern Missouri, U S A Described, H A Ward, 1901, Proc Rochester Acad Science, Vol 4, pp 65, 66	95469	106056
183	1850	<b>SALT RIVER</b> —Finest Octahedrite Off Twenty miles south of Louisville (37° 56' N, 85° 54' W), Bullitt County, Kentucky, U S A Described, Sillman, Jr, 1850, Proc Am Assoc Science, Vol 4, pp 36, 37	11	11
184	1897	<b>SAN ANGELO</b> —Medium Octahedrite Om San Angelo (31° 20' N, 100° 20' W), Tom Green County, Central Texas, U S A Described, Preston, 1898, Am Jour Science, Ser 4, Vol 5, pp 269-272	2638	4516
185	1896	<b>SAN CRISTOBAL</b> —Ataxite Linnville Group De San Cristobal (23° 0' S, 69° 0' W), Province of Atacama, Chili Described, Cohen 1898, Sitzungsber K Pr Akad der Wissensch, pp 608, 609	114	114
186	1868	<b>SAN FRANCISCO DEL MEZQUITAL</b> —Ataxite Siratik Group Ds (Mezquitil) (23° 40' N, 104° 28' W), State of Durango, Mexico Described, Daubrée, 1868, Comptes Rendus, Vol 66, pp 573, 574	12	12
187	1872	<b>SANTA APOLONIA</b> —Octahedrite O Near Pueblo of Nativitas (19° 14' N, 98° 15' W), State of Tlaxcala, Mexico Original mass (1050 kilos) in Museum of the Instituto Geologico, City of Mexico Undescribed	212	212
188	1824	<b>SANTA ROSA</b> —Brecciated Octahedrite Zacatecas Group Obz Hill of Tocavita (5° 49' N, 72° 56' E), near Santa Rosa, Province of Boyaca, Columbia, South America Described, Mariano de Rivero et Boussingault, 1824, Ann Chim Phys, Vol 15, pp 438-443	96	96
189	1883	<b>SÃO JULIAO DE MOREIRA</b> —Broadest Octahe- drite Ogg Near Ponte de Lima (41° 30' N, 8° 20' W), Prov- ince of Minho, Portugal Described, Ben-Saude, 1888, Comm da commiss dos Trab Geol de Portugal, Vol 2, pp 14-16	968	968

## WARD-COONLEY COLLECTION OF METEORITES

No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
199	1887	<b>SILVER CROWN</b> —Broad Octahedrite Og Twenty-one miles west of Cheyenne (41° 5' N, 105° 12' W), Laramie County, Wyoming, U S A Described, Kunz, 1888, Am Jour Science, Ser 3, Vol 36, pp 276, 277	75	75
200	1839	<b>SMITHLAND</b> —Ataxite Babb's Mill Group Db Smithland (37° 18' N, 88° 17' W), Livingston County, Western Kentucky, U S A Described, Troost, 1846, Am Jour Science, Ser 2, Vol 2, pp 357, 358	49	49
201	1863	<b>SMITH'S MOUNTAIN</b> —Fine Octahedrite Of Two miles north of Madison (36° 32' N, 79° 58' W), Rockingham County, North Carolina, U S A Described, Tschermak, 1872, Meteoriten, M M, Vol 2, p 172	214	214
202	1840	<b>SMITHVILLE</b> —Broad Octahedrite Og (Caryfort) (35° 55' N, 85° 46' W), De Kalb County, Tennessee, U S A Described, Brezina, 1895, Wiener Sammlung, pp 255, 256	2140	4038
203	1873	<b>SSYROMOLOTOW</b> —Medium Octahedrite Om Angara (59° 0' N, 99° 0' E), Government of Yeniseisk, Eastern Siberia Described, Gobel, 1874, Bull Ac Imp des Sc de St Petersburg, Vol 19, pp 544-554	22	27
204	1858	<b>STAUNTON</b> —Medium Octahedrite Om Staunton (38° 14' N, 79° 1' W), Augusta County, Virginia, U S A Described, Mallet, 1871, Am Jour Science, Ser 3, Vol 2, pp 10-15	1772	3626
205	1890	<b>SUMMIT</b> —Granular Hexahedrite Ha Near Summit (34° 13' N, 86° 30' W), Blount County, Alabama, U S A Described, Kunz, 1890, Am Jour Science, Ser 3, Vol 40, pp 322, 323	39	39
206	1899	<b>SURPRISE SPRINGS</b> —Medium Octahedrite Om Surprise Springs (34° 12' N, 115° 54' W), San Bernardino County, California, U S A Described, Rust, 1899, Overland Monthly, pp 11, 12	1410	1410
207	1891	<b>TAJGHA</b> —Medium Octahedrite Om Tajgha (56° 48' N, 94° 0' E), near Krasnojarsk, Government of Jeniseisk, Siberia Mentioned, Cohen, 1894, Meteoriten-kunde, p 93	17	17
208	1880?	<b>TANOGAMI</b> —Medium Octahedrite Om Mount Tanogami (about 35° 20' N, 136° 40' E), Kurifoto District, Province of Omi, Japan Undescribed	20	30



No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
209	1853	<b>TAZEWELL</b> —Finest Octahedrite Off Tazewell (36° 27' N, 83° 48' W), ten miles west of Claiborne County, East Tennessee, U S A Described, Smith, 1854, Am Jour Science, Ser 2, Vol 17, p 131	197	279
210	1784	<b>TENNANT'S IRON</b> —Broad Octahedrite Og From Mineral Collection of the Agricultural Academy of Petrowskoje-Rasumowskoje, near Moscow, Russia (From old collection of Ten- nant, London) Undescribed	4	4
211	1903	<b>TEOCALTICHE</b> —Octahedrite O Canton of Teocaltiche (21° 25' N, 102° 27' W), State of Jalisco, Mexico Original mass (weight 10 kilos) in Museum of the Instituto Geologico, City of Mexico	40	40
212	1891	<b>TERNERA</b> —Atacite Cape Group De Sierra de la Ternera, Atacama, Chile Described, Kunz u Weinschenk, 1891, M P M, Bd 12, pp 184, 185	1	1
213	1886	<b>THUNDA</b> —Medium Octahedrite Om Windorah (25° 25' S, 142° 40' E), Diamantina District, Queensland, Australia Described, Liversidge, 1886, Jour and Proc Roy Soc of New South Wales, Vol 20, pp 73, 285	1000	1181
214	1895	<b>THURLOW</b> —Fme Octahedrite Of Thurlow (44° 22' N, 77° 20' W), Hastings County, Ontario, Canada Recorded, Dana, 1897, Am Jour Science, Ser 4, 4, Vol 4, p 325	209	209
215	1903	<b>TLACOTEPEC</b> —Octahedrite O Tlacotepec (18° 45' N, 97° 39' W), District of Tecamachalco, State of Puebla, Mexico Mass (weighing 24 kilos) in Museum of Instituto Geologico, City of Mexico	40	40
216	1784	<b>TOLUCA</b> —Medium Octahedrite Om Xiquipilco (19° 20' N, 99° 45' W), Toluca Valley, State of Mexico, Mexico Described Del Rio, 1804, Tablas Mineralogicas, 1804, p 57	19247	69295
217	1878	<b>TOMBIGBEE RIVER</b> —Granular Hexahedrite Ha Tombigbee River (32° 13' N, 88° 10' W), Choctaw County, Alabama, U S A Described, Foote, 1899, Am Jour Science, Ser 4, Vol 8, pp 153-156	530	530
218	1886	<b>TONGANOXIE</b> —Medium Octahedrite Om Tonganoxie (39° 8' N, 95° 7' W), Leavenworth County, Kansas, U S A Described, Snow, 1891, Science, Jan 2	359	709

No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
219	1891	<b>TOUBIL</b> —Medium Octahedrite Om Two hundred and fifty miles north of Krasnojarsk (59° 0' N, 91° 0' E), District of Atchinsk, Government of Jeniseisk, Siberia Described, Khlaponin, 1898, Institute des Mines, St Petersburg, Russia	330	330
220	1858	<b>TRENTON</b> —Medium Octahedrite Om Trenton (43° 20' N, 88° 12' W), thirty miles north- west of Milwaukee, Wisconsin, U S A Described, Dörfinger, 1868, Smithsonian, Rep for 1869, pp 417-419	3315	3561
221	1851	<b>TUCSON</b> —Ataxite Muchachos Group Dm Muchachos Ainsa—Signet Mass Carleton—Tucson Mass State of Sonora, Mexico Later transferred to Tucson, Arizona Described by Dr John L Le Conte, 1852 Notice of meteoric iron in the Mexican Province of Sonora, American Journal of Science, Ser 2, Vol 13, pp 289, 290 Iron in Valle de los Muchachos was reported by Mexican writers in 1660	1660 853 27	2540
222	1846	<b>TULA</b> —Brecciated Octahedrite Netschaevo Group Obn Netschaevo (54° 35' N, 37° 34' E), Government of Tula, Central Russia Described, Auerbach, 1858, Bull de la Soc Impér des Naturalistes, Moskou, Vol 31, pp 331, 332	136	166
223	1853	<b>UNION COUNTY</b> —Broadest Octahedrite Ogg Union County (34° 56' N, 83° 58' W), Northern Georgia, U S A Described, Shepard, 1854, Am Jour Science, Ser 2, Vol 17, p 328	67	67
224	1894	<b>UTE PASS</b> —Broadest Octahedrite Ogg Ute Pass (39° 48' N, 106° 10' W), Summit County, Colorado, U S A Undescribed	120	120
225	1871	<b>VICTORIA</b> —Medium Octahedrite Om Saskatchewan (53° 0' N, 111° 15' W), on Iron Creek, northwest of Edmonton, British America Described, Coleman, 1886, Proc and Trans Roy Soc of Canada, 1887, Vol 4, Sec 3, 97	253	253
226	1862	<b>VICTORIA WEST</b> —Fine Octahedrite Victoria Group Of Victoria West (31° 58' S, 23° 5' E), Central Cape Colony, South Africa Described, Gregory, 1868, Geol Mag, Vol 5, p 532	17	17

No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
227	1887	<b>WALDRON RIDGE</b> —Broad Octahedrite Og Near Tazewell (36° 25' N, 83° 44' W), Claiborne County, Tennessee, U S A Described, Kunz, 1887, Am Jour Science, Ser 3, Vol 34, pp 475, 476	430	430
228	1832	<b>WALKER COUNTY</b> —Normal Hexahedrite H Walker County (33° 50' N, 87° 15' W), Northern Alabama, U S A Described, Troost, 1845, Am Jour Science, Ser 1, Vol 49, p 344	40	40
229	1898	<b>WEAVER</b> —Ataxite H Weaver Mountain (33° 58' N, 112° 35' W), near Wickenburg, Maricopa County, Arizona, U S A Original mass (85½ lbs) in Museum of State School of Mines, Tucson, Arizona Undescribed	394	394
230	1888	<b>WELLAND</b> —Medium Octahedrite Om Welland (42° 59' N, 79° 14' W), Welland County, Ontario, Canada Described, Howell, 1890, Proc Rochester Acad of Science, Vol 1, pp 86, 87	202	364
231	1876	<b>WERCHNE DNEPROWSK</b> —Finest Octahedrite Off Werchne Dneprowsk (48° 25' N, 43° 10' E), Government Ekatermoslav, Russia Described, Brezina, 1885, Wiener Sammlung, pp 208, 233	99	99
232	1854	<b>WERCHNE UDINSK</b> —Medium Octahedrite Om Werchne Udinsk (52° 20' N, 109° 50' E), Trans- baikalia, Central Siberia Described, Rose, 1863, Meteoriten, pp 65, 153	295	552
233	1836	<b>WICHITA</b> —Broad Octahedrite Og Wichita County (34° 0' N, 98° 40' W), Northern Texas, U S A Described, Shumard, 1860, Trans Acad of Science, St Louis, Vol 1, pp 622, 623	902	1018
234	1902	<b>WILLAMETTE</b> —Medium Octahedrite Om Near Willamette (45° 22' N, 122° 35' W), Clack- amas County, Northern Oregon, U S A Described by H A Ward, 1904, Proc of the Rochester Acad of Sciences, Vol 4, pp 137-148	13267	25125
235	1858	<b>WOOSTER</b> —Medium Octahedrite Om Wooster (40° 48' N, 81° 58' W), Wayne County, Ohio, U S A Described, Smith, 1864, Am Jour Science, Ser 2, Vol 38, pp 385, 386	10	10
236		<b>YANHUITLAN</b> —Fine Octahedrite Of Yanhuitlan (17° 40' N, 97° 0' E), four leagues north- east of Teposcolula, State of Oaxaca, Mexico Brought from Teposcolula about 1830 Taken to City of Mexico, 1864	9587	16380

No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
237	1875	<b>YARDEA STATION</b> —Medium Octahedrite Om Four miles south of Yardea Station ( 32° 20' S, 136° 0' E), Gawler Range, South Australia Recorded, Etheridge, Jr , 1897, Rec Austr Mus , Vol 3, No 3	73	73
238	1884	<b>YOUNDEGIN</b> —Broad Octahedrite Og (Penkarrang Rock) (31° 30' S, 117° 30' E), 70 miles east of York, West Australia Described, Fletcher, 1887, Mineralog Magaz , Vol 7, pp 121-130	140842	145751
239	1792	<b>ZACATECAS</b> —Brecciated Octahedrite Zacatecas Group Obz Few miles southwest of Zacatecas (22° 40' N, 102° 36' W), State of Zacatecas, Mexico Described, Gazeta de Mexico, 1792, T 5, No 7, del Martes 3 de Abril de 1792, p 58-60	1246	1575



CAÑON DIABLO SIDERITE

## II SIDEROLITES

No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
240	1881	<b>ADMIRE</b> —Pallasite Rokicky Group Pr Admire (33° 0' N, 96° 5' W), 15 miles west from Osage City, Lyon County, Kansas, U S A Described, 1902, Merrill, Proceedings of U S National Museum, Vol 24, pp 907-913	7402	10902
241	Prehistoric	<b>ANDERSON</b> —Pallasite Krasnojarsk Group Pk Turner Mounds (39° 10' N, 84° 18' W), Anderson Township, Hamilton County, Ohio, U S A Described, Kinnicutt, 1884, 16th and 17th Annual Report of Museum of Am Arch and Ethnol, p 384	2	2
242	1842, July 4	<b>BAREA</b> —Mesosiderite M Barea (42° 23' N, 2° 30' W), Sierra de Chaco, Province Logroño, Spain Reported, Greg, 1854, Catalogue Philos Mag, Vol 8, p 460	5	7
243	1802	<b>BITBURG</b> —Pallasite Albacher Group Pa Albacher Muhle (49° 59' N, 6° 30' E), North of Trèves, Rhenish Prussia Described, Gibbs, 1814, Bruce's Am Mineralogical Jour, Vol 1, pp 219-221	570	963
244	1810	<b>BRAHIN</b> —Pallasite Rokicky Group Pr Near Rokicky (51° 46' N, 30° 10' E), Govern- ment of Minsk, Western Russia Described, Laugier, 1817, Memoires du Museum, Paris	53	85
245	1890	<b>BRENHAM</b> —Pallasite Krasnojarsk Group Pk Brenham, and vicinity (37° 38' N, 99° 13' W), Kiowa County, Kansas, U S A Described, Kunz, 1890, Am Jour Science, Ser 3, Vol 40, p 312	45073	73030
246	1863	<b>COPIAPO</b> —Brecciated Octahedrite Copiapo Obc Group Sierra de Deesa, southern part of Desert of Ata- cama (27° 24' S, 70° 20' W), Chili Described, Haidinger, 1864, Sitzungsber d K Akad d Wissensch, Bd 49, P 2, p 490	195	195
247	1887	<b>CRAB ORCHARD</b> —Grahamite Mg Powder Mill Creek (35° 53' N, 84° 48' W), 8 miles west of Rockwood Furnace, Cumberland County, Tennessee, U S A Described, Whitfield, 1887, Am Jour Science, Ser 3, Vol 34, pp 387-390	1920	2574

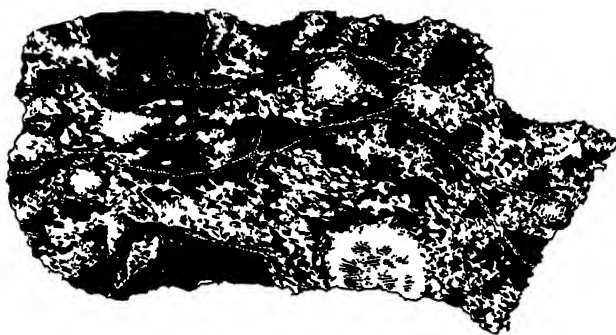
No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
248	1888	<b>DONA INEZ</b> —Mesosiderite M Cerro de Doña Inez (25° 17' S, 68° 58' W), Province of Atacama, Chili Described, Howell, 1890, Proc Rochester Acad of Science, Vol 1, pp 93-98	270	639
249	1880	<b>EAGLE STATION</b> —Pallasite Rokicky Group Pr Near Eagle Station (38° 37' N, 85° 0' W), Carroll County, Kentucky, U S A Described, Kunz, 1887, Am Jour Science, Ser 3, Vol 33, pp 228-232	168	335
250	(Fell ) 1879, May 10	<b>ESTHERVILLE</b> —Mesosiderite M Estherville (43° 24' N, 94° 50' W), Emmet County, Iowa, U S A Described, Peckham, 1879, Am Jour Science, Ser 3, Vol 18, pp 77, 78	5087	7896
251	1902	<b>FINMARKEN</b> —Pallasite Krasnojarsk Group Pk Amt Finmark (About 69° 42' N, 22° 13' E), Norway Described, Cohen, 1903, Mitth d Naturw Ver f Neu-Vorp u Rugen, Jahrg 35	300	300
252	1856	<b>HAINHOLZ</b> —Mesosiderite M Hainholz (51° 43' N, 8° 46' E), near Minden, Westphalen Described, Wohler, 1857, Pogg Ann, Vol 100, pp 342-345	1048	2585
253	Prehistoric	<b>HOPEWELL</b> —Medium Octahedrite Om Hopewell Mounds (39° 10' N, 83° 20' W), North Fork of Paint Creek, Ross County, Ohio, U S A Described, Farrington, 1902, Field Columbian Museum, Geol Series, Vol 1, pp 310-314	1	3
254	1822	<b>IMILAC</b> —Pallasite Imilac Group P <sub>1</sub> Wells of Imilac (24° 4' S, 68° 36' W), Province of Atacama, Chili Described, Allan, 1828, Edinburgh Philos Trans, Vol 11, pp 223-226	206	467
255	1888	<b>LLANO DEL INCA</b> —Mesosiderite M Llano del Inca (26° 40' S, 69° 31' W), Desert of Atacama, Chili Described, Howell, 1890, Proc Rochester Acad of Sciences, Vol 1, pp 93-98	27	119
256	1868	<b>LODHRAN</b> —Lodhranite Lo Twelve miles east of Lodhran (29° 32' N, 71° 40' E) Mooltan, Punjab Province, India Described, Oldham, 1869, Rec Geol Survey, India, Vol 2, Part 1, pp 20, 34	1	2

## SIDEROLITES

31

No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
257	Prehistoric	<b>LUJAN</b> —Mesosiderite M Near Villa Lujan (34° 40' S, 58° 50' W), Province of Buenos Ayres, Argentine Republic Recorded, H. A. Ward, 1892, The Ward Collection of Meteorites, p 37, No 147, Rochester, 1902	2	2
258	(Fell) 1902 June 15	<b>MARJALAHTI</b> —Pallasite Imilac Group P <sub>i</sub> Marjalahti Bay (62° 32' N, 5° 15' E), Ladoga Lake, Finland, Russia Described, Borgstrom, 1903 Die Meteoriten von Hvittis und Marjalahti, pp 45-68, Helsingfors	543	543
259	1857	<b>MACQUAIRE RIVER</b> —Mesosiderite M Macquaire River (31° 30' S, 152° 56' E), New South Wales, Australia	58	58
260	1749	<b>MEDWEDEWA</b> —Pallasite Krasnojarsk Group P <sub>k</sub> Medwedewa (Krasnojarsk), (51° 25' N, 92° 0' E), Government of Jeniseisk, Central Siberia Described, Pallas, 1776, Reise durch versch., Pro- vinzen des Russ Reichs, St Petersburg, Part 3, p 411	298	785
261	1874	<b>MEJILLONES</b> —Grahamite Mg Near Mejillones (23° 6' S, 70° 21' W), Province of Atacama, Chili Described, Domeyko, 1875, Comptes Rendus, T 81, pp 597, 598	185	185
262	1860	<b>MINCY</b> —Mesosiderite M Mincy (36° 35' N, 93° 7' W), Taney County, Missouri, U S A Described, Shepard, 1860, Am Jour Science, Ser 2, Vol 30, pp 205, 206	2152	2152
263	1887	<b>MORRISTOWN</b> —Grahamite Mg Six miles west-southwest from Morristown (36° 9' N, 83° 24' W), Hamblen County, Tennessee, U S A Described, Eakins, 1893, Am Jour Science, Ser 3, Vol 46, pp 283-285	2215	4259
264	1903	<b>MOUNT DYRRING</b> —Pallasite Krasnojarsk Group P <sub>k</sub> Mount Dyrring (32° 30' S, 151° 10' E), 8 miles north of Bridgman, Singleton District, New South Wales, Australia Described, Card, 1903, Rec Geol Survey of New South Wales, Vol 7, Part 3, pp 217-219	132	132
265	1868	<b>MOUNT VERNON</b> —Pallasite Krasnojarsk Group P <sub>k</sub> Mount Vernon, Christian County, Kentucky, U S A Described, Merrill, 1903, American Geologist	2190	2190

No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
266	1885	<b>PAVLODAR</b> —Pallasite Krasnojarsk Group Pk Pavlodar, Jamyschewa, near (51° 30' N, 76° 40' E), Semipalatinsk, Government of Tomsk, West Siberia, Asia Described, Brezina, 1893, Verhdl d Ges deutsch Naturf und Aerzte, Nurnberg	1414	1414
267	1833	<b>STEINBACH</b> —Siderophyre Si Rittersgrun, Saxony (50° 29' N, 12° 48' E)	149	
	1861	Breitenbach, Bohemia (50° 23' N, 12° 46' E) Described (Rittersgrun), Breithaupt, 1861, Zeitsch d d Geol Gesellschaft, Vol 13, p 148 Described (Breitenbach), Rose, 1864, Zeitsch d d Geol Gesellschaft, Vol 16, pp 355, 356	46	195
268	1861	<b>VACA MUERTA</b> —Grahamite Mg Llano de Vaca Muerta (25° 42' S, 70° 18' W), Desert of Atacama, Chili Described, Domeyko, 1862, Comptes Rendus, T 55, pp 873, 874	170	283
269	(Fall) 1880, Feb	<b>VERAMIN</b> —Mesosiderite M Plain of Veramin (35° 46' N, 51° 36' E), 12 miles east of Teheran, Persia Described, Dietsch, 1881, Berg-und-Huttenm Zeitung, Vol 40, p 100	1015	1037



MORRISTOWN (HAMBLÉN COUNTY), SIDEROLITE



## III AEROLITES

## CHRONOLOGY OF THOSE SEEN TO FALL

No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
270	1814, Sept 5	<b>AGEN</b> —Intermediate veined Chondrite Cia Agen (44° 24' N, 0° 29' E), Département du Lot- et-Garonne, France Described, M de Saint-Amans, et M Thiébaud de Berneaud, Sept 17th, 1814, Ann Chim, J 92, pp 25-32	255	255
271	1822, Aug 7	<b>AGRA</b> —Gray Chondrite, veined Cga Kadonah (27° 20' N, 78° 5' E), near Agram, Province of Doab, India Recorded, Malte Brun, 1834, Nouv Annal des Voyag de la Geogr et de la Hist, Ser 3, T 2	13	18
272	1838, Apr 18	<b>AKBURPUR</b> —Gray Chondrite, brecciated Cgb Akburpur (26° 20' N, 80° 30' E), near Cawnpore, N W Provinces, India Recorded, Greg, 1854, Philos Mag, p 460	7	7
273	1806, Mch 15	<b>ALAIS</b> —Carbonaceous Chondrite K Alais (44° 0' N, 4° 15' E), and Vicinity, Départe- ment du Gard, France Described, Pagès et Dhombres-Firmas, 1806, Jour Phys, T 62, pp 440-442	12	12
274	1766, July	<b>ALBARETO</b> —Spherulitic Chondrite Cc Albareto (44° 41' N, 10° 57' E), near Modena, Province of Modena, Italy Described, Troili, 1766, Della caduta di un sasso dall aria, Modena	15	15
275	1835, Aug 4	<b>ALDSWORTH</b> —Gray Chondrite, veined Cga Aldsworth (51° 43' N, 1° 58' W), near Cirencester, Gloucestershire, England Described, Greg, 1854, Catalogue, Philos Magaz, Vol 4, No 8, p 460	4	4
276	1873	<b>ALEPPO</b> —White Chondrite, brecciated Cwb Aleppo (36° 12' N, 37° 4' E), Province of Aleppo, Asia Minor Described, Brezina, 1893, Ueber neuere Meteoriten, Verhandl der Ges Deutsch Naturf und Aerzte, Nurnberg, p 159	10	19
277	1860, Feb 2	<b>ALESSANDRIA</b> —Gray Chondrite, veined Cga Alessandria (44° 54' N, 8° 35' E), Valley of San Giuliano Vecchio, Province of Alessandria, Italy Described, Missaghi, 1861, Nuovo Cimento, T 13, p 272	70	70

No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
278	1883, Feb 16	<b>ALFIANELLO</b> —Intermediate Chondrite C <sub>i</sub> Alfianello (45° 16' N, 10° 9' E), Province of Brescia, Italy Described, Bombicci, 1883, Reale Accademia dei Lincei, 1882-83, p 11	4638	5039
279	1899, July 10	<b>ALLEGAN</b> —Ornansite C <sub>co</sub> Allegan (42° 34' N, 85° 52' W), Allegan County, Michigan, U S A Described, H L Ward, 1899, Am Jour Science, Ser 4, Vol 8, pp 412-414	264	701
280	1895, Mch 27	<b>AMBAPUR NAGLA</b> —Spherulitic Chondrite, crys- talline C <sub>ck</sub> Sikandra Rao Tahsil (27° 38' N, 77° 42' E), Aligarh District, N W Provinces, India Main mass (some 4 kilos) in Indian Museum, Cal- cutta Undescribed	13	40
281	1898, Aug 5	<b>ANDOVER</b> —Spherulitic Chondrite C <sub>c</sub> Andover (44° 36' N, 70° 47' W), Oxford County, Maine, U S A Described, H A Ward, 1902, Proc Rochester Acad Science, Vol 4, pp 79, 80	91	91
282	1822, June 3	<b>ANGERS</b> —White Chondrite, veined C <sub>wa</sub> Angers (47° 28' N, 0° 34' W), Département de Maine-et-Loire, France Described, Gilbert, 1822, G <sub>ulb</sub> Am Bd 71, pp 345-353	28	28
283	1869, Jan	<b>ANGRA DOS REIS</b> —Angrite A Angra dos Reis (22° 52' S, 44° 20' W), Province of Rio Janeiro, Brazil Described, Tschermak, 1885, Sitzber Wien Akad, Bd 92, Part I, p 110	6	10
284	1803, Oct 8	<b>APT</b> —Gray Chondrite, veined C <sub>ga</sub> Saurette, near Apt (43° 52' N, 5° 23' E), Départe- ment de Vaucluse, France Recorded, Bourdon, 1803, Moniteur, Nov 24, Paris	34	34
285	1805, Nov	<b>ASCO</b> —White Chondrite, veined C <sub>wa</sub> Asco (42° 28' N, 9° 2' E), Island of Corsica, Med- iterranean Sea Described, Partsch, 1843, Meteoriten, p 64	5	9
286	1846	<b>ASSAM</b> —Gray Chondrite, brecciated C <sub>gb</sub> State of Assam, India Recorded, Piddington, 1846, Jour Asiat Soc of Bengal, Vol 15, p 46	3	3
287	1886, May 24	<b>ASSISI</b> —Spherulitic Chondrite C <sub>c</sub> Torre (43° 4' N, 12° 36' E), near Assisi, Province of Perugia, Italy Described, Bellucci, 1887, Tipografia di Vincenzo Santucci, Perugia, 1887, 8 Seiten	69	119

## AEROLITES

35

No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
288	1836, Sept 14	<b>AUBRES</b> —Bustite Bu Aubres (44° 22' N, 5° 8' E), Département de la Drome, France Described, Gregory, 1887, Geol Mag, Vol 3, Nr 12	15	15
289	1842, June 4	<b>AUMIÈRES</b> —White Chondrite, veined Cwa Aumières (44° 18' N, 3° 13' E), Département de la Lozère, France Described, de Malbos, 1842, Comptes Rendus, T 14, pp 917, 918	19	34
290	1858, Dec 9	<b>AUSSON</b> —Spherulitic Chondrite Cc Ausson (43° 4' N, 0° 34' E), Département de la Haute Garonne, France Described, Petit, 1858, Comptes Rendus, T 47, pp 1053-1055	182	342
291	1856, June	<b>AVILEZ</b> —Spherulitic Chondrite Cc Hacienda d'Avilez (24° 50' N, 103° 52' W), State of Durango, Mexico Described, Wohler, 1867, Gott Gel Anz, pp 57, 58	6	6
292	1814, Feb 15	<b>BACHMUT</b> —White Chondrite Cw Bachmut, near Alexejewka (48° 34' N, 37° 52' E), Government of Ekaterinoslaw, Russia Described, Giese, 1815, Gilb Ann, Bd 50, pp 117, 118	26	26
293	1871, Dec 10	<b>BANDONG</b> —Rodite Ro Bandong (6° 50' S, 108° 0' E), Province of Pre- anger, Java Described, Everwijn, 1872, Jaarboek, van het Mynwezen in Nederlandsch Ost India, Deel 2, p 197	17	25
294	1852	<b>BARRATTA</b> —Gray Chondrite, brecciated Cgb Barratta Station (35° 15' S, 144° 36' E), thirty- five miles northwest of Deniliquin, New South Wales, Australia Described, Liversidge, 1872, Trans Royal Soc New South Wales, Vol 6, pp 97, 98	72933	84694
295	1790, July 24	<b>BARBOTAN</b> —Gray Chondrite, veined Cga Barbotan (43° 57' N, 0° 4' E) and vicinity, Dé- partement des Landes, France Described, Bertholon, 1790, Journ des Sciences utiles, Nr 23 und 24, p 305	315	329
296	1892, Aug 29	<b>BATH</b> —Gray Chondrite, brecciated Ccb Near Bath (45° 27' N, 98° 19' W), Brown County, South Dakota, U S A Described, Foote, 1893, Am Jour Science, Ser 3, Vol 45, pp 64, 65	1744	1744

No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
297	1902, Nov 15	<b>BATH FURNACE</b> —Intermediate Chondrite veined Cia Five miles south of Salt Lick (38° 2' N, 83° 37' W), Bath County, Kentucky, U S A Recorded, Miller, 1903, Science, Jan 16, 1903	3055	3055
298	1893, May 26	<b>BEAVER CREEK</b> —Spherulitic Chondrite, crystal- line Cck Near boundary of United States on Beaver Creek, West Kootenai District, British Columbia Recorded, Howe, 1893, Science, Vol 12, No 546, p 41	1103	2081
299	1798, Dec 19	<b>BENARES</b> —Spherulitic Chondrite Cc Near Krakhut (25° 48' N, 82° 42' E), Benares, Northwestern Provinces India Described, Howard, 1802, Philos Trans, 1802, pp 175-179	8	8
300	1811, July 8	<b>BERLANGUILLAS</b> —Intermediate Chondrite, veined Cia Berlanguillas (41° 41' N, 3° 48' W), Province of Burgos, Spain Described, Comte Dorsenne, 1811, Bibl Brit, Vol 48, pp 162-164	9	20
301	1859, Aug 11	<b>BETHLEHEM</b> —Spherulitic Chondrite, crystalline Cck Bethlehem (42° 6' N, 73° 47' W), near Albany, Albany County, New York, U S A Described, Shepard, 1859, Am Jour Science, Ser 2, Vol 28, pp 300-303	1	1
302	1859, May	<b>BEUSTE</b> —Gray Chondrite, brecciated Cgb Beuste (43° 18' N, 0° 37' W), Département des Basses Pyrénées, France Described, Danbrée, Comptes Rendus, T 76, pp 315, 316	37	37
303	1827, Oct 5	<b>BIALYSTOCK</b> —Howardite Ho Bialystock (53° 12' N, 23° 10' E), Government of Bialystock, Russia Recorded, 1828, Chute d' Aerolithe en Russie, Ann Chim Phys, T 39, p 421	5	5
304	1887, Jan 1	<b>BIelokRYNITSCHIE</b> —Intermediate Chondrite, brecciated Cib Bielokrynitschie (50° 8' N, 26° 44' E), Government of Volhynien, Russia Described, Agafonov, 1891, Trav Soc Nat Pet, T 21, p 20	257	308
305	1843, Mch 25	<b>BISHOPVILLE</b> —Chladnite, veined Chla Near Bishopville (34° 12' N, 80° 18' W), Sumter County, South Carolina, U S A Described, Shepard, 1846, Am Jour Science, Ser 2, Vol 2, pp 379, 384, 392	14	76

## AEROLITES

37

No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
306	1895, April 26	<b>BISHUNPUR</b> —Black Chondrite Cs Bishunpur (25° 6' N, 82° 37' E), Mirzabur District, Northwest Provinces, India Recorded, Fletcher, 1896, Introd to Study of Meteorites, London	6	6
307	1796, Jan 15	<b>BJELAJA ZERKOV</b> —Spherulitic Chondrite Cc Bjelaja Zerkov (49° 50' N, 30° 6' E), Ukraine, Government of Kief, Russia Described, Stoikowitz, 1809, Gilb Ann, Bd 31, p 307	5	7
308	1899, Mch 12	<b>BJURBOLE</b> —Spherulitic Chondrite, veined Cca Bjurbole (60° 20' N, 26° 0' E), near Borga, South Coast of Finland, Baltic Russia Described, Ramsay and Borgstrom, 1902, Bull de la Commis Géol de Finlande, No 12, Hel- singfors, Russia	4790	6030
309	1833, Nov 25	<b>BLANSKO</b> —Gray Chondrite, veined Cga Blansko (49° 20' N, 16° 38' E), Province of Mo- ravia, Austria Described, v. Reichenbach, 1834, Neues Jahrbuch fur Mineralogie, Geologie, etc, 1834, pp 125, 126	11	11
310	1878	<b>BLUFF</b> —Crystalline Chondrite, brecciated Ckb Bluff (29° 52' N, 96° 48' W), three miles southwest of La Grange, Fayette County, Texas, U S A Described, Whitfield and Merrill, 1888, Am Jour Science, Ser 3, Vol 36, pp 113-119	8607	21707
311	1804, Nov 24	<b>BOCAS</b> —White Chondrite Cw Hacienda de Bocas (22° 28' N, 101° 5' W), State of San Louis Potosi, Mexico Recorded, Burkart, 1865, Verhdl Naturh Ver von Bonn, Bd 22, p 71	1	1
312	1808, April 19	<b>BORG SAN DONINO</b> — Ch Borgo San Donino (44° 47' N, 10° 4' E), Cusignano, near Parma, Italy Described, Guidotti, 1808, "Encyclopédie," Vol 5, 1808, pp 596-602	6	11
313	1894, May 9	<b>BORI</b> —Intermediate Chondrite, veined Cia Bori (22° 1' N, 78° 1' E), twelve miles northeast of Badnur, Betul District, Northwestern Prov- inces, India Described, Brezina, 1895, Wiener Sammlung, p 248	497	497
314	1852, Oct 13	<b>BORKUT</b> —Spherulitic Chondrite Cc Borkut (48° 7' N, 24° 17' E), Comitad of Marmar- osch, Hungary Described, Leydolt, 1856, Sitzber Wien Akad, Bd 20, 1856, II, pp 398-406	49	49

No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
315	1812, Sept 5	<b>BORODINO</b> —Gray Chondrite, brecciated Cgb Borodino (55° 33' N, 35° 47' E), near Kolotscha, Government of Moscow, Russia Described, Brezina, 1895, Wiener Sammlung, p 250	1	1
316	1823	<b>BOTSCHETSCHKI</b> —Gray Chondrite Cg Botschetschkı (50° 23' N, 36° 5' E), Government of Kursk, Russia Described, Partsch, 1843, Meteoriten, p 70	11	11
317	1855, May 13	<b>BREMERVORDE</b> —Spherulitic Chondrite, brecciated Ccb Bremervörde (53° 30' N, 9° 8' E), near Gnarren- burg, Province of Hanover, Germany Described, Wöhler, 1855, Gött gel Anz (Nachr ), 1855, p 142	17	29
318	1863, June 23	<b>BUSCHHOF</b> —White Chondrite, veined Cwa Buschhof (56° 18' N, 25° 53' E), near Jacobstadt, Kurland, Baltic Provinces, Russia Described, Grewingk, 1863, Rigaer Zeitung, Nr 127	21	45
319	1852, Dec 2	<b>BUSTEE</b> —Bustite Bu Bustee (26° 47' N, 82° 48' E), District of Goruck- pur, Northwest Provinces, India Described, Reichenbach, 1862, Pogg Ann, Bd 115, pp 620-636	5	5
320	1861, May 12	<b>BUTSURA</b> —Intermediate Chondrite Ci Butsura (27° 5' N, 84° 10' E), 42 miles northeast of Goruckpur, Northwestern Provinces, India Described, Haidinger, 1862, Sitzungsber der Akad der Wissensch, Bd 45, pp 665-671	27	38
321	1870, Aug 18	<b>CABEZZO DE MAYO</b> —White Chondrite Cw Cabezzo de Mayo (37° 59' N, 1° 10' W), Province of Murcia, Spain Described, D Juan de Velasco, 1870, El Tiempo, Nr 247, vom 20 Okt, 1870	103	160
322	1861, May 14	<b>CANELLAS</b> —Intermediate Chondrite Ci Canellas (41° 15' N, 1° 40' W), near Barcelona, Province of Barcelona, Spain Described, Greg, 1861, Philos Mag, Vol 22, pp 107, 108	7	9
323	1866, Dec 6	<b>CANGAS DE ONIS</b> —Gray Chondrite, brecciated Cgb Cangas de Onis (Engueras) (43° 26' N, 5° 10' W), Province of Oviedo, Spain Described, Romer, 1873, Geologische Reisenotizen aus der Sierra Morena, N J, 1873, p 257	54	113

No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
324	1846, Aug 14	<b>CAPE GIRARDEAU</b> —Spherulitic Chondrite Cc Seven miles south of Cape Girardeau (37° 13' N, 89° 32' W), Cape Girardeau County, Missouri, U S A Described, Dana and Penfield, 1886, Am Jour Science, Ser 3, Vol 32, pp 229, 230	43	61
325	1888	<b>CARCOTE</b> —Crystalline Chondrite Ck Carcote, Province of Atacama, Chili, S A Described, Sandberger, 1889, N J, pp 173-180	1	1
326	1874, May 14	<b>CASTALIA</b> —Gray Chondrite, brecciated Cgb Near Castalia (36° 4' N, 78° 4' W), Nash County, North Carolina, U S A Described, Kerr, 1875, Rep Geol Surv, North Carolina, Vol I, App, p 313	185	185
327	1848, May 20	<b>CASTINE</b> —White Chondrite, veined Cwa Castine (44° 24' N, 68° 48' W), Hancock County, Maine Described, Shepard, 1848, Am Jour Science, Ser 2, Vol, 6 pp 251-253	42	42
328	1840, July 17	<b>CERSETO</b> —Spherulitic Chondrite, brecciated Ccb Cereseto (45° 4' N, 8° 20' E), near Ottiglio, Prov- ince of Alessandria, Italy Described, Sismonda 1840, Atti della seconda riunione degli scienziati Italiani tenuta in Torino nel Settembre del 1840	9	9
329	1838, June 6	<b>CHANDAKAPUR</b> —Intermediate Chondrite, brecciated Cib Chandakapur (21° 10' N, 79° 10' E), Valley of Berar, India Described, Greg, 1854, Philos Magaz (4), Vol 8, p 460	68	91
330	1812, Aug 5	<b>CHANTONNAY</b> —Gray Chondrite, brecciated Cgb Chantonnay (46° 40' N, 1° 50' W), Département de la Vendée, France Described, Chladni, 1819, Vierte Fortsetzung, Gibb Ann, Vol 60, pp 239, 247, 248	46	46
331	1810, Nov 23	<b>CHARSONVILLE</b> —Gray Chondrite, veined Cga Charsonville (47° 56' N, 1° 35' E) (Chartres), Meung sur Loire, Département du Loiret, France Described, Moniteur, Dec 1810, Auszug in Bibl Brit, Vol 45, Nr 360, pp 397-400	23	42
332	1834, June 12	<b>CHARWALLAS</b> —Intermediate Chondrite Ci Charwallas (29° 10' N, 75° 27' E), 20 miles south southeast of Sirsa, Punjab States, India Recorded, 1834, Jour Asiatic Soc of Bengal, No 32, Aug 1834	1	1

No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
333	1815, Oct 3	<b>CHASSIGNY</b> —Chassignite Cha Chassigny, near Langres, Département de la Haute- Marne, France Described, Pistollet, 1816, Ann Chim Phys, Vol 1, pp 45-48	10	10
334	1841, June 12	<b>CHÂTEAU-RENARD</b> —Intermediate Chondrite, veined Cia Château-Renard (47° 56' N, 2° 58' E), Montargis, Département du Loiret, France Described, Delavaux, 1841, Comptes Rendus, Vol 12, pp 1190, 1191	174	250
335	1838, Oct 13	<b>COLD BOKKEVELD</b> —Carbonaceous Chondrite K Cold Bokkeveld (33° 14' S, 19° 6' E), 15 miles north of Tulbagh, Cape Colony, Africa Described, Maclear and Watermeyer, 1839, Phil Trans Royal Soc, London, 1839, I, pp 83-85	26	65
336	1890, Feb 3	<b>COLLESCIPOLI</b> —Spherulitic Chondrite Cc Collescipoli (42° 32' N, 12° 38' E), near Terni, Province of Perugia, Italy Described, Terenzi, 1890, Rivista di Scienze Naturali di S Brogi, Anno X, Nr 3	63	107
337	1844, Jan	<b>COSINA</b> —Crystalline Chondrite Ck Loma de la Cosina (21° 7' N, 100° 34' W), near Dolores Hidalgo, State of Guanajuato, Mexico Described, Burkart, 1865, Verh Naturh Ver von Bonn, Bd 22, p 71	5	5
338	1877, Mch 9	<b>CRONSTADT</b> —Gray Chondrite, veined Cga Cronstad (26° 37' S, 27° 15' E), Orange Free State, Africa Described, Brezina, 1885, Wiener Sammlung, p 182	6	10
339	1892, May 24	<b>CROSS ROADS</b> —Gray Chondrite Cg Cross Roads Township (35° 38' N, 78° 7' W), Wilson County, North Carolina, U S A Described, Howell, 1893, Am Jour Science, Ser 3, Vol 46, p 67	18	18
340	1877, Jan 23	<b>CYNTHIANA</b> —Gray Chondrite Cg Nine miles from Cynthiana (38° 24' N, 84° 16' W), Harrison County, Kentucky, U S A Described, Smith, 1877, Am Jour Science, Ser 3, Vol 14, pp 224-229	7	22
341	1878, Sept 5	<b>DANDAPUR</b> —Intermediate Chondrite, veined Cia Dandapur (26° 50' N, 83° 18' E), District of Gorak- pur, Northwest Provinces, India Described, Meunier, 1884, Météorites, p 209	65	65



No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
342	1868, Mch 20	<b>DANIELS KUIL</b> —Crystalline Chondrite Ck Daniels Kuil (28° 10' S, 23° 35' E), Griqualand West, South Africa Described, Gregory, 1868, Geol Magaz, Vol 5, pp 531, 532	13	17
343	1868, Nov 27	<b>DANVILLE</b> —Gray Chondrite, veined Cga Near Danville (34° 24' N, 87° 5' W), Morgan County, Alabama, U S A Described, Smith, 1870, Am Jour Science, Ser 2, Vol 49, pp 90-93	5	5
344	1829, Aug 14	<b>DEAL</b> —Intermediate Chondrite Ci Deal (40° 14' N, 74° 1' W), near Long Branch, Monmouth County, New Jersey, U S A Described, Vaux and M'Euen, 1829, Trans Acad Nat Sci, Phila Vol 16, p 181	1	1
345	1887, Jan 21	<b>DE CEWSVILLE</b> —White Chondrite Cw De Cewsville (44° 56' N, 79° 55' W), Haldimand County, Ontario, Canada Described, Huntington, 1888, Proc Amer Acad Arts and Sci, Vol 23, p 102	1	1
346	1877, Nov 27	<b>DHULIA</b> —White Chondrite, veined Cwa Dhulia (20° 54' N, 75° 10' E), near Bhagur, Bom- bay Presidency, India Described, Brezina, 1878, Akad Anzeiger Wien, Bd 15, pp 213, 214	1	2
347	1860, July 14	<b>DHURMSALA</b> —Intermediate Chondrite Ci Dhurmsala (32° 15' N, 76° 20' E), District of Kangra, Punjab Provinces, India Recorded, 1862, Jour Geol Soc Dublin, Vol 10, P 1, pp 7-11	1414	2901
348	1884, Mch 19	<b>DJATI PENGILON</b> —Crystalline Chondrite Ck Djati Pengilon (7° 18' S, 111° 20' E), District of Ngawi, Island of Java Described, Verbeek and Retgers, 1886, Jaarboek van het Mijnwezen Nederlandsch Oost-Indie Wetens Ged, Vol 15, pp 145-171	28	39
349	1864, June 26	<b>DOLGOWOLI</b> —White Chondrite Cw Dolgowoli (50° 46' N, 25° 20' E), Government of Volhynia, Russia Described, Heis, 1864, Wochenschrift f Astron- omie, 1864, p 328	7	7
350	1805, April 6	<b>DORONINSK</b> —Gray Chondrite, brecciated Cgb Doroninsk (50° 30' N, 112° 20' E,) Government of Irkutsk, East Siberia, Asia Described, Gilbert, 1808, Gilb Ann, Vol 29, pp 212, 213	53	53

No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
351	1827, May 9	<b>DRAKE CREEK</b> —White Chondrite, veined Cwa Drake Creek (36° 18' N 86° 34' W), Sumner County, Tennessee, U S A Described, Sillman, 1837, Am Jour Science, Ser 1, Vol 17, pp 326-328	129	129
352	1865, Aug 12	<b>DUNDRUM</b> —Crystalline Chondrite Ck Dundrum (52° 33' N, 8° 2' W), Tipperary County, Ireland Described, Haughton, 1866, Philos Mag, Vol 32, pp 260-266	1	1
353	1815, Feb 18	<b>DURALA</b> —Intermediate Chondrite, veined Cia Durala (32° 34' N, 76° 36' E), 18 miles south of Umballa, Punjab States, India Recorded, Bird, 1820, Tillock's Philos Mag, Vol 56, pp 156, 157	25	25
354	1872, May 8	<b>DYALPUR</b> —Ureilite U Dyalpur (26° 16' N, 82° 9' E), Sultanpur, Oudh States, India Described, Brezina, 1882, Bericht 4, Sitzber Wien Akad, Bd 85, Pt 1, pp 338, 339	1	1
355	1889	<b>ELI ELWAH</b> — Eli Elwah Station (34° 18' S, 144° 0' E), 15 miles west of Hay, New South Wales, Australia Described, Liversidge, 1890, Proc Austr Assoc Adv Science, p 388	2	3
356	1492, Nov 16	<b>ENSISHEIM</b> —Crystalline Chondrite, brecciated Ckb Ensisheim (47° 51' N, 7° 22' E), Province of Elsass, Germany Described, Sebastian Brand, 1492 (a Latin song with translation)	399	474
357	1822, Sept 13	<b>EPINAL</b> —Spherulitic Chondrite Cc Epinal (48° 9' N, 6° 35' E), Commune of La Baffe, Département des Vosges, France Described, Parisot, 1822, Gilb Ann, Bd 72, pp 323-327	12	19
358	1889, July	<b>ERGHEO</b> —Crystalline Chondrite, breccialike Ckb Amana, near Ergheo (1° 6' N, 43° 50' E), west of Barava, Somali Land, East Africa	399	474
359	1812, April 15	<b>ERXLEBEN</b> —Crystalline Chondrite Ck Erxleben (52° 13' N, 11° 14' E), Province of Sax- ony, Prussia Described, Hausmann and Vieth, 1812 Gilb Ann, Bd 40, pp 450-459	49	49
360	1837, Aug 3	<b>ESNANDES</b> —Gray Chondrite Cg Esnandes (46° 14' N, 1° 10' E), Département de la Charente-Inferieure, France Recorded, 1837, L'Institut, T 5, No 220, p 334	23	23

No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
361	1890, June 25	<b>FARMINGTON</b> —Black Chondrite, veined Csa Farmington (39° 48' N, 97° 5' W), Washington County, Kansas, U S A Described, Snow, 1890, Science, July 18, 1890, Vol 16, pp 38, 39	3570	6753
362	1844, Oct 21	<b>FAVARS</b> —Intermediate Chondrite C1 Favars (46° 4' N, 0° 38' E), Département de l'Aveyron, France Described, Boisse, 1844, L'Institut, No 570, T 12, p 399	21	29
363	1900, May 15	<b>FELIX</b> —Carbonaceous Chondrite, spherulitic Kc Near Felix (32° 33' N, 87° 12' W), Perry County, Alabama, U S A Described, Merrill, 1901, Proc U S Nat Mus, Vol 24, pp 193-198	50	50
364	1894, April 9	<b>FISHER</b> —Intermediate Chondrite, veined Cia Fisher (47° 48' N, 96° 49' W), Polk County, Minne- sota, U S A Described, Winchell, 1894, Am Geol, Vol 14, p 389	277	410
365	1890, May 2	<b>FOREST</b> —Spherulitic Chondrite, brecciated Ccb Near Forest City (43° 17' N, 93° 38' W), Winne- bago County, Iowa, U S A Described, Torrey and Barbour, 1890, Am Jour Science, Ser 3, Vol 39, pp 521, 522	1774	5120
366	1829, May 8	<b>FORSYTH</b> —White Chondrite, veined Cwa Near Forsyth (33° 3' N 83° 56' W), Monroe County, Georgia, U S A Described, Sillman, 1830, Am Jour Science, Ser 1, Vol 18, p 388	42	48
367	1868, Dec 5	<b>FRANKFORT</b> —Howardite Ho Four miles south of Frankfort (34° 30' N, 87° 52' W), Franklin County, Alabama, U S A Described, Brush, 1869, Am Jour Science, Ser 2, Vol 48, pp 240-244	7	7
368	1882, Mch 19	<b>FUKUTOMI</b> —Gray Chondrite, veined Cga Fukutomi (about 33° 10' N, 130° 10' W), Kine- shima District, Province of Hizen, West Coast of Japan Recorded, Clarke, 1888, Am Jour Science, Ser 3, Vol 35, p 264	179	179
369	1822, Nov 30	<b>FUTTEHPUR</b> —White Chondrite, veined Cwa Futtehpur (25° 50' N, 80° 40' E), Northwest Prov- inces, India Described, 1828, Edinburgh Jour Science, No 15, p 171	39	77

No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
370	1826, May 25	<b>GALAPIAN</b> —White Chondrite, veined Cwa Galapian (44° 13' N, 0° 38' E), near Agen, Département de Lot-et-Garonne, France Described, von Hoff, 7, Nachtrag, Pogg Ann, Bd 18, p 185	3	5
371	1900	<b>GERONA</b> —White Chondrite, brecciated Cwb Gerona (41° 58' N, 2° 50' E), Province of Gerona, Spain Mass in Royal Museum of Madrid, Spain Undescribed	1	1
372	1897, Sept 15	<b>GHAMBAT</b> —Intermediate Chondrite, veined Cia Ghambat (27° 32' N, 68° 53' E), Khairpur, Province of Sind, India Recorded, 1901, Fedden, Pop Guide to Geol Collect, Indian Museum, Calcutta	75	75
373	1889	<b>GILGOIN</b> —Crystalline Chondrite Ck Gilgoi Station (30° 35' S, 147° 12' E), 40 miles southeast of Brewarrina, New South Wales, Australia Recorded, Russell, 1889, Jour Royal Soc New South Wales, Vol 23, p 47	11963	12720
374	1853, Feb 10	<b>GIRGENTI</b> —White Chondrite, veined Cwa Girgenti (37° 17' N, 13° 34' E), Island of Sicily, Italy Recorded, Greg, 1854, Philos Mag, p 460, London	45	74
375	1879, May 17	<b>GNADENFREI</b> —Spherulitic Chondrite Cc Gnadenfrei (51° 41' N, 16° 46' E), Province of Silesia, Prussia Recorded, Galle, 1879, Jahresber, der Schles Ges f Vaterl Kult, Bd 37, pp 166-169	18	29
376	1868	<b>GOALPARA</b> —Ureilite U Goalpara (26° 25' N, 90° 42' E), Province of Assam, India Described, Haidinger, 1869, Sitzber Wien Akad, Bd 59, II, pp 665-678	2	6
377	1837, July 24	<b>GROSS-DIVINA</b> —Spherulitic Chondrite Cc Gross-Divina (49° 15' N, 18° 44' E), Trentsiner Comitatz, Hungary Recorded, Zipser, 1840, Letter in N J, pp 89, 90	2	5
378	1881, Nov 19	<b>GROSSLIEBENTHAL</b> —White Chondrite, veined Cwa Grossliebenthal (46° 21' N, 28° 14' E), 12 miles northeast of Odessa, Government of Cherson, Russia Described, Daubrée, 1884, Comptes Rendus, T 98, pp 323, 324	21	31

No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
379	1861, June 28	<b>GROSSNAJA</b> —Black Chondrite Cs Grossnaja (43° 21' N, 45° 42' E), Banks of the River Terek, Caucasus Mts, Russia Described, Rose, 1862, Mon Ber Berlin Akad, 1862, p 186	76	76
380	1841, Mch 20	<b>GRUNEBERG</b> —Gray Chondrite, veined Cga Gruneberg (51° 56' N, 15° 22' E), Province of Silesia, Prussia Described, Pogg Ann, 1841, Vol 52, pp 495, 496	99	123
381	1892, July 20	<b>GUARENA</b> —Crystalline Chondrite Ck Guarena (38° 44' N, 6° 8' W), Province of Bada- joz, Spain Described, Calderon, 1892, Act de la Soc Esp de Hist Nat, Seg Ser, T 21	14	20
382	1851, April 17	<b>GUTERSLOH</b> —Spherulitic Chondrite, brecciated Ccb Gutersloh (51° 55' N, 8° 21' E), near Minden, Province of Westphalia, Prussia Described, Dove, 1851, Mon Ber Berlin Akad, 1851, pp 269, 270	2	3
383	1858, Mch 28	<b>HARRISON COUNTY</b> —Howarditic Chondrite Cho Harrison County (38° 12' N, 86° 8' W), Indiana, U S A Described, Smith, 1858, Am Jour Science, Ser 2, Vol 28, pp 409-411	1	2
384	1901	<b>HENDERSONVILLE</b> — Hendersonville (35° 19' N, 82° 28' W), Henderson County, North Carolina, U S A Main mass in United States National Museum, Washington, D C Undescribed	23	23
385	1857, April 1	<b>HEREDIA</b> —Spherulitic Chondrite, brecciated Ccb Heredia (10° 1' N, 84° 41' W), 15 miles from San José, Costa Rica, Central America Described, Harris, 1859, Dissert Gott, pp 99, 100	5	5
386	1869, Jan 1	<b>HESSLE</b> —Spherulitic Chondrite Cc Hessle (59° 43' N, 17° 25' E), near Upsala, Sweden Described, Fahnehjelm, 1869, Oefversigt af Vetensk Akad Forhandl Nro I, pp 59, 60	363	407
387	1804, April 4	<b>HIGH POSSIL</b> —White Chondrite Cw High Possil (55° 54' N, 4° 18' W), near Glasgow, Scotland Described, Tilloch, 1806, Gilb Ann, Bd 24, pp 369-376	3	4
388	1875, Feb 12	<b>HOMESTEAD</b> —Gray Chondrite, brecciated Cgb Homestead (41° 39' N, 91° 32' W), and vicinity, Iowa County, Iowa, U S A Described, Hinrichs, 1875, Popular Sci, Sept, 1875	5403	6737

No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
389	1825, Sept 27	<b>HONOLULU</b> —White Chondrite, veined Cwa Honolulu (21° 17' N, 157° 51' W), Island of Oahu, Hawanan Islands, U S A Described, Kotzebue, 1823-1826, Reise um die Welt in den Jahren 1823-24-25-26	11	17
390	1877, May 17	<b>HUNGEN</b> —Gray Chondrite, veined Cga Hungen (50° 28' N, 8° 54' E), Grand Duchy of Hessen, Germany Described, Buchner, 1877, Mineralogische Mitthei- lungen, 1877, pp 313-315	2	2
391	1901, Oct 21	<b>HVITTIS</b> —Spherulitic Chondrite, crystalline Cck Hvittis (61° 10' N, 22° 30' E), Province of Finland, Russia Described, Borgstrom, 1903, Die Meteoriten von Hvittis und Marjalathi, pp 3-44, Helsingfors	567	567
392	1870, June 17	<b>IBBENBUHREN</b> —Chladnite Chl Ibbenbuhren (52° 17' N, 7° 42' E), Province of Westphalia, Prussia Described, vom Rath, 1871 Verh naturh Ver Bonn, Bd 28, pp 127, 128	5	5
393	1887, April 17	<b>IHARAOTA</b> —Howarditic Chondrite, veined Choa Iharaota (24° 39' N, 78° 22' E), District of Lahit- pur, Northwestern Provinces, India Described, Mallet, 1887, Rec Geol Surv, Vol 20, pp 153, 154	9	11
394	1891, April 7	<b>INDARCH</b> —Carbonaceous Chondrite, spherulitic Kc Indarch (39° 38' N, 46° 44' W), near Gindorcha, District of Schuscha, Trans-Caucasia Russia Described, Siemaschko, 1891, Catalogue de la Col- lection des Météorites de Julien de Siemaschko, St Petersburg, 1891, pp 55, 56	18060	20035
395	1900	<b>INDIO RICO</b> —Crystalline Chondrite Ck Indio Rico, Province of Buenos Ayres, Argentine, South America	11	11
396	1879, March	<b>ITAPICURU-MIRIM</b> —Spherulitic Chondrite Ce Itapicuru-mirim (3° 24' S, 43° 50' W), Province of Maranhao, Brazil Described, Derby, 1888, Meteoritos Brasileiros, Revista do Observatorio, Rio de Janeiro, Brazil	6	6
397	1889, Dec 1	<b>JELICA</b> —Amphoterite Am Near Jezevica (43° 54' N, 20° 21' E), District of Cacak, Jelica Mountains, Servia Described, Doll, 1890, Verh K K geol Reich- sanst, pp 70, 77	82	194

No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
398	1894, April 10	<b>JEROME</b> —Spherulitic Chondrite, crystalline Cck Fifteen miles east of Jerome (38° 47' N, 100° 14' W), Smoky Hill River, Gove County, Kansas, U S A Described, Washington, 1898, Am Jour Science, Ser 4, Vol 5, pp 447-454	63	63
399	1873, June	<b>JHUNG</b> —Spherulitic Chondrite Cc Jhung (31° 37' N, 72° 15' E), Punjaub States, India Recorded, Fedden, 1880, Guide to Geol Collect, in Indian Museum, Calcutta	7	17
400	1819, June 13	<b>JONZAC</b> —Eukrite Eu Jonzac (45° 26' N, 0° 27' W), Département de la Charente Inferieure, France Described, Chladni, 1819, Funfte Fortsetzung, Gilb Ann, Bd 63, p 24	3	7
401	1876, Feb 16	<b>JUDESEGERI</b> —Spherulitic Chondrite Cc Judesegeiri (13° 20' N, 77° 12' E), District of Tum- kur, State of Mysore, India Recorded, Medlicott, 1876, Journal Asiat Soc of Bengal, p 221	4	4
402	1821, June 15	<b>JUVINAS</b> —Eukrite Eu Juvinas (44° 42' N, 4° 21' E), near Libonnez, Département de l'Ardèche, France Described, 1821, Extrait d'une lettre de M Jules de Malbos, cet extrait a été communiqué à l' Acad- émie des Sciences, Ann Chim Phys, T 17, pp 434-439	112	294
403	1857, April 15	<b>KABA</b> —Carbonaceous Chondrite K Kaba (47° 22' N, 21° 16' E), southwest of Debrec- zin, Nord-Bibarer Comitát, Hungary Described, von Torok, 1858, Pogg Ann, Bd 105, pp 329-334	2	2
404	1858	<b>KAKOWA</b> —Gray Chondrite, vemed Cga Kakowa (45° 6' N, 21° 38' E), northwest of Ora- witz, Kraschower Comitát, Hungary Described, Harris, 1859, Dissert Gott, pp 22-24	1	1
405	1840, May 4	<b>KARAKOL</b> —White Chondrite Cw Karakol (about 42° 40' N, 70° 25' E), District of Ajagus, Kirghiz Steppe, Central Asia Described, Partsch, 1843, Meteoriten, p 143	30	30
406	1874, Nov 26	<b>KERILIS</b> —Gray Chondrite, veined Cga Kerilis (48° 25' N, 3° 26' E), Département des Cotes-du-Nord, France Described, Daubrée, 1880, Comptes Rendus, T 91, pp 28-30	6	15

No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
407	1869, May 22	<b>KERNOUVÉ</b> —Crystalline Chondrite, veined Cka Kernouvé (48° 71' N, 3° 4' W), near Clèguère, Département du Morbihan, France Described, de Lumur, 1869, Comptes Rendus, T 68, pp 1338, 1339	106	106
408	1850, June 13	<b>KESEN</b> —Spherulitic Chondrite, brecciated Ccb Grove of Buddhist Temple of Choyenji, Village of Kesen, Province of Hondo, Japan Described, H A Ward, Am Jour Science, Ser 3, Vol 45, pp 153-155	1289	1966
409	1873, Sept 23	<b>KHAIRPUR</b> —Crystalline Chondrite Ck Khairpur (29° 51' N, 72° 12' E), near Sutlej River, State of Bhawalpur, India Described, Medlicott, 1874, Jour Asiat Soc of Bengal, Vol 43, Pt 2, pp 33-38	64	64
410	1787, Oct 12	<b>KHARKOW</b> —White Chondrite, veined Cwa Kharkow (Jigalowka) (50° 17' N, 35° 10' E), 7 miles from Bobrik, Government of Charkow, Russia Recorded, 1808, Gilb, Ann, Bd 29, p 213	10	10
411	1867, Jan 19	<b>KHETRIE</b> —Gray Chondrite, brecciated Cgb Khetrie (28° 9' N, 75° 30' E), east of Jhunjhnu, Rajputana States, India Described, Oldham, 1867, Catalogue from Calcutta, p 8	6	6
412	1809	<b>KIKINO</b> —White Chondrite, veined Cwa Kikino (55° 17' N, 34° 13' E), District of Wjasemsk, Government of Smolensk, Russia Described, Eichwald, 1847, Erman's Archiv fur wissensch Kunde Russlands, Bd 5, p 177	61	61
413	1844, April 29	<b>KILLETER</b> —White Chondrite, veined Cwa Killeter (54° 44' N, 7° 40' W), County Tyrone, Ire- land Recorded, Greg, 1854, Catalogue, Philos, Mag, p 460	3	4
414	1899	<b>KISSIJ</b> —Black Chondrite Cs Near Tschuwaschskye Kissij (55° 20' N, 51° 50' E), District of Tschistopol, Government of Kazan, Russia Described, Stuckenberg, 1900, Naturf Ges in Kasan	420	420
415	1862, Oct 7	<b>KLEIN MENOW</b> —Spherulitic Chondrite, crystal- line Cck Klein Menow (53° 11' N, 13° 8' E), Grand Duchy of Mecklenburg-Strehtz, Germany Described, Pogg Ann, 1862, Bd 117, pp 637, 638	80	145
416	1843, Sept 16	<b>KLEIN WENDEN</b> —Crystalline Chondrite Ck Klein Wenden (15° 24' N, 10° 38' E), near Nord- hausen, Province of Saxony, Prussia Described, Pogg Ann, 1843, Bd 60, pp 157, 158	2	2



No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
417	1866, June 9	<b>KNYAHINYA</b> —Gray Chondrite Cg Knyahinya (48° 58' N, 22° 31' E), near Nagy- Berezna, Ungvarer Comitatus, Hungary Described, Haidinger, 1866, Sitzber, Wien Akad, Vol 54, pp 200-205	1970	5025
418	1869, May 5	<b>KRAHENBERG</b> —Howarditic Chondrite Cho Krahenberg (49° 20' N, 7° 28' E), near Zwei- brücken, Rhenish Bavaria Described, Keller, 1869, Palatina, Beibl z Pfalzer Zeitung, Vol 3, Juli, No 79, p 318, 1869	1	1
419	1829, Sept 29	<b>KRASNOJ-UGOL</b> —Spherulitic Chondrite Cc Krasnoj-Ugol (53° 56' N, 40° 28' E), District of Saposhok, Government of Rasan, Russia Described, 1830, Pogg Ann, Bd 17, pp 379, 380	1	1
420	1811, Mch 12	<b>KULESCHOWKA</b> —White Chondrite, veined Cwa Kuleschowka (50° 43' N, 33° 45' E), District of Romener, Government of Poltawa, Russia Described, Gilbert, 1811, Gilb Ann, Bd 38 p 120	14	14
421	1879, Jan 31	<b>LA BECASSE</b> —White Chondrite Cw La Becasse (46° 50' N, 6° 43' E), Commune de Dun-le-Poehier, Département de l'Indre, France Described, Daubrée, 1879, Comptes Rendus, T 89, No 14, p 597	21	21
422	1871, June 14	<b>LABOREL</b> —Intermediate Chondrite, brecciated Cib Laborel (44° 20' N, 5° 10' E), Département de la Drôme, France Described, Brezina, 1895, Wiener Sammlung, p 249	11	16
423	1803, April 26	<b>L'AIGLE</b> —Intermediate Chondrite, brecciated Cib L'Aigle (45° 45' N, 0° 38' E) and vicinity, Départe- ment de l'Orne, France Described, Biot, 1803, Mem de l'Institut, T 7, p 224	204	645
424	1872, July 23	<b>LANCE</b> —Carbonaceous Chondrite, spherulitic Kc Lancé (47° 41' N, 1° 2' E), Département de Loin- et-Cher, France Described, de Tastes, 1872, Comptes Rendus, T 75, pp 273-276	9	15
425	1897, June 20	<b>LANCON</b> —Intermediate Chondrite, veined Cia Lancon (43° 34' N, 5° 22' E), near Aix en Provençe, Département des Bouches-du-Rhône, France	104	104

No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
426	1902	<b>LENORKA</b> — Lenorka, Government of Poltava, Russia Main Mass in Museum of Kief, Government of Kief, Russia Undescribed	2	2
427	1845, Jan 25	<b>LE PRESSEUR</b> —Spherulitic Chondrite Ce Le Pressoir (47° 9' N, 1° 18' E), Commune of Louans, Département d' Indre-et-Loir, France Described, Daubrée, 1881, Comptes Rendus, T 92, pp 984, 985	9	9
428	1857, Oct 1	<b>LES ORMES</b> —White Chondrite Cw Les Ormes (47° 51' N, 3° 15' E), near Joigny, Département de l'Yonne, France Described, Séguier, 1857, l'Institut, T 25, p 363	1	1
429	1896, April 13	<b>LESVES</b> —White Chondrite Cw Lesves (50 °72' N, 4° 33' E), Province of Namur, Belgium Described, Renard, 1896, Bull Acad Royal Bel- gique, 3, 31, No 6, pp 654-663	32	32
430	1845, July 14	<b>LE TEILLEUL</b> —Howardite Ho La Vivionnière (48° 32' N, 0° 53' W), Commune of Le Teilleul, Département de la Manche, France Described, Daubrée, 1879, Comptes Rendus, T 88, pp 544-547	5	14
431	1813	<b>LIMERICK</b> —Gray Chondrite, brecciated Cgb Adare (52° 31, N 8° 42' W) and vicinity, County of Limerick, Ireland Described, Tennant, 1814, Jour Pharm, p 211, Sept, 1814	52	52
432	1854, Sept 5	<b>LINUM</b> —White Chondrite Cw Linum (52° 46' N, 12° 52' E), near Fehrbellin, Province of Brandenburg, Prussia Described, Rose, 1854, Berichte Berlin Akad der Wissensch, pp 525-527	1	1
433	1808, Sept 3	<b>LISSA</b> —White Chondrite, brecciated Cwb Lissa (50° 12' N, 14° 54' E), District of Bunzlau, Bohemia Described, v Schreibers, 1808, Gilb Ann, Bd 30, pp 358-361	156	198
434	1839, Feb 13	<b>LITTLE PINEY</b> —Spherulitic Chondrite Ce Pine Bluff (37° 55' N, 92° 5' W), on Gasconade River, ten miles southwest of Little Piney, Pulaski County, Missouri, U S A Described, Herrick, 1839, Am Jour Science, Ser 1, Vol 37, pp 385, 386	2	3
435	1820, July 12	<b>LIXNA</b> —Gray Chondrite, veined Cga Lasdany (56° 0' N, 26° 25' E), near Lixna, Province of Kurland, Russia Described, Plater-Seiberg, 1820, Allg Deutsche Zeitung fur Russland, No 180, July 28, 1820, Mitau, Kurland	61	72

No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
436	1891	<b>LONG ISLAND</b> —Intermediate Chondrite, veined Cia Three miles west of Long Island (39° 56' N, 99° 34' W), Phillips County Kansas, U S A Recorded, Farrington, 1895, Catal of Meteorites, Field Col Museum, Pub No 3 p 59	9270	15466
437	1768, Sept 13	<b>LUCE</b> —White Chondrite, veined Cwa Lucé-en-Maine (47° 52' N, 0° 30' E), Département de la Sarthe, France Described, Bachelay, 1769, Hist de l'Acad Royale, pp 20, 21	3	5
438	1869, Oct 6	<b>LUMPKIN</b> —Spherulitic Chondrite, crystalline Cck Twelve miles southwest (31° 54' N, 84° 57' W), of Lumpkin, Stewart County, Georgia, U S A Described, Smith, 1870, Am Jour Science, Ser 2, Vol 50, p 293	3	3
439	1889, April 3	<b>LUNDSGARD</b> —White Chondrite Cw Lundsgard (55° 25' N, 15° 52' E), Parish of Ljungby, Lan of Malmöhus, Sweden Described, Svedmark, 1889, Geol Foeren i Stockholm Förh, 1889, Vol XI, pp 245, 246	34	55
440	1813, Dec 13	<b>LUOTOLAKS</b> —Howardite Ho Luotolaks (61° 13' N, 27° 49' E), near Frederiks- havn, Government of Viborg, Finland, Russia Described, Scherer, 1815-'16, Bull Petersburg Akad, Vol 7	1	3
441	1753, Sept 7	<b>LUPONNAS</b> —Intermediate Chondrite, brecciated Cib Luponnas (46° 14' N, 4° 59' E), sixteen miles from Pont de Veyle, Département de l'Ain, France Described, Jerome de la Lande, 1756, Etrennes historiques de la Province de Bresse, p 32	15	15
442	1836, Nov 11	<b>MACAO</b> —Intermediate Chondrite, veined Cia Macao (5° 10' S, 36° 40' W), mouth of Rio Assu, Province of Rio Grande do Norte, Brazil Described, Berthon, 1837, Comptes Rendus, T 5, p 211	11	11
443	1870	<b>MAC KINNEY</b> —Black Chondrite Cs Eight miles southwest (33° 9' N, 96° 45' W), of Mac- Kinney, Collin County, Texas, U S A Described, v Hauer, Ann Hof-Mus, Vol 10, p 34	46773	51230
444	1896, Feb 10	<b>MADRID</b> —White Chondrite, veined Cwa Madrid (40° 25' N, 3° 43' W), Province of Madrid, Spain Described, Calderon, 1896, Le Naturaliste, 2, 18, No 216, pp 55, 56	1	1

No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
445	1886, Nov 10	<b>MAËMÊ</b> —Intermediate Chondrite, veined C <sub>1a</sub> Maémê Hislugari (about 31° 45' N, 130° 36' E) Province of Satsuma, Japan Recorded, Clark, 1888, Am Jour Science, Ser 3, Vol 35, p 264	158	243
446	1850	<b>MAINZ</b> —Intermediate Chondrite, veined C <sub>1a</sub> Near Mainz (50° 0' N, 8° 16' E), Grand Duchy of Hessen, Germany Described, Seelheim, 1857, Jahrb d Ver fur Naturk in Nassau, Heft 12 p 405	13	39
447	1879	<b>MAKARIWA</b> —Gray Chondrite brecciated C <sub>gb</sub> Makariwa (46° 20' S, 168° 25' E), near Invercar- gill, New Zealand Described, Ulrich, 1893, Proc Royal Soc, Vol 53, pp 54-64	3	3
448	1863, Dec 22	<b>MANBHOOM</b> —Amphoterite Am Manbhoom (23° 52' N 86° 35' E), Bengal Presi- dency, India Described, Harding, 1864, Sitzber Wien Akad, Vol 50, pp 241-246	18	18
449	1843, June 29	<b>MANEGAUM</b> —Chladnite Chl Manegaum (17° 59' N, 75° 37' E), District of Kandeish, India Described, Abbott, 1844, Jour Asiat Soc of Bengal, Vol 13, pp 880-886	1	1
450	1847, Feb 25	<b>MARION</b> —White Chondrite, veined C <sub>wa</sub> Nine miles from Marion (Hartford) (41° 57' N, 91° 34' W), Linn County, Iowa, U S A Described, Shepard, 1847, Am Jour Science, Ser 2, Vol 4, pp 288, 429	60	188
451	1848, July 4	<b>MARMANDE</b> —Spherulitic Chondrite Cc Montignac (44° 31' N, 0° 10' E), near Marmande, Département de Lot-et-Garonne, France Described, Greg, 1862, Philos Mag, Vol 24, p 540	2	2
452	1835, Jan 31	<b>MASCOMBES</b> —White Chondrite Cw Mascombes (45° 20' N, 1° 52' E), Département de la Corrèze, France Described, Daubrée, 1864, Comptes Rendus, T 58, pp 229, 230	8	15
453	1803, Dec 13	<b>MASSING</b> —Howardite Ho Massing (48° 27' N, 12° 36' E), Landgericht Eggen- feld, Bavaria Described, Blumenbach, 1804, Voigts Mag fur Naturkunde, Bd 7, p 233	1	2

No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
454	1768, Nov 20	<b>MAUERKIRCHEN</b> —White Chondrite Cw Near Mauerkirchen (48° 12' N, 13° 7' E), Upper Austria Described, Chladni, 1803, Gölz Ann., Vol 15, pp 310, 316, 317	42	73
455	1801, Dec 22	<b>MAURITIUS</b> —Howarditic Chondrite Cho Isle aux Tonneliers (20° 18' S, 57° 35' E), north- western Coast of Island of Mauritius, Indian Ocean Recorded, Bory de Saint-Vincent, 1804, Voyage dans les quatre principales îles des mers d' Afrique fait par ordre du gouvernement pen- dant les années neuf et dix de la République, 1801 and 1802, T 3, pp 254-262	6	6
456	1897, May 19	<b>MEUSELBACH</b> —Spherulitic Chondrite, crystalline, veined Ceka Meuselbach (50° 39' N, 10° 5' E), Amt Gehren, Principality of Schwartzburg-Rudolstadt, Ger- man Empire Described, Linck, 1899, Annalen, des K. K. Hof- museums, p 103, Wien	3	3
457	1859, April 4	<b>MEXICO</b> —Gray Chondrite, brecciated Cgb Mexico (15° 10' N, 120° 40' E), Province of Pam- panga, Island of Luzon, Philippine Archipelago Described, Llanos, 1859, Obs y diseño de los aerol cando en Pampanga, 4, VI, 1859	2	2
458	1852, Sept 4	<b>MEZO-MADARAS</b> —Gray Chondrite, brecciated Cgb Near Mezo-Madaras (46° 37' N, 24° 19' E), Province of Transylvania, Austria Described, Knopfler, 1852, Verh d Siebenburg Ver., Vol 3, pp 153, 154	331	497
459	1827, Feb 16	<b>MHOW</b> —Intermediate Chondrite Ci Mhow (25° 55' N, 83° 37' E), Azamgarh District, Northwestern Provinces, India Described, Edinburgh Jour Science, July, 1828, p 172	2	2
460	1851, Mch 14	<b>MIDDLESBOROUGH</b> —White Chondrite Cw Pennyman's Siding (54° 35' N, 1° 14' W), near Middlesborough, County of York, England Recorded, Herschel, 1881, Notice of the fall of an Aerolite, Newcastle Daily Chronicle, March 30, 1881 Newcastle-on-Tyne, England	1	1
461	1889, June 18	<b>MIGHEI</b> —Carbonaceous Chondrite K Mighei (38° 56' N, 46° 9' E), District of Elisabeth- grad, Government of Kherson, South Russia Described, von Siemaschko, 1890, Nature, Vol 41, p 272	2330	2357

No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
462	1842, April 26	<b>MILENA</b> —White Chondrite Cw Pusinsko Selo (46° 11' N, 16° 4' E), four miles south of Milena, Warasdiner Comitatus, Province of Croatia, Austrian Empire Described, Korevar, Pogg Ann, Vol 56, pp 349, 350	10	14
463	1888	<b>MINAS GERAES</b> —White Chondrite, veined Cwa Province of Minas Geraes, Brazil Described, Derby, 1888, Revista do Observatorio, Rio de Janeiro, 1888, p 12, Sept	4	6
464	1890, April 10	<b>MISSHOF</b> —Spherulitic Chondrite Cc Manor of Misshof (56° 30' N, 24° 21' E), eight miles west-southwest of Baldohn, Province of Kurl- land, Baltic Russia Described, Doss, 1891, Arbeiten des Naturf Ver, Riga, N F, Heft 7	176	342
465	1882, Feb 3	<b>MOCs</b> —White Chondrite, veined Cwa Mocs (46° 48' N, 23° 42' E), and vicinity, near Klausenburg, Province of Transylvania, Austria Described, Hauer, 1882, Verh k k geol Reich- sanst, 1882, pp 77, 78	2223	6747
466	1858, Dec 24	<b>MOLINA</b> —Gray Chondrite, brecciated Cgb Molina (38° 7' N, 1° 10' W), Province of Murcia, Spain Described, Daubrée and Meunier, 1868, Comptes Rendus, T 66, pp 639-642	33	33
467	1849, Mch 31	<b>MONROE</b> —Gray Chondrite, veined Cga Cabarrus County (35° 13' N, 80° 32' W), eighteen miles north of Monroe, Union County, North Carolina, U S A Described, Gibbon, 1850, Am Jour Science, Ser 2, Vol 9, pp 143-146	80	99
468	1846, May 8	<b>MONT MILONE</b> —White Chondrite, brecciated Cwb Monte Milone (43° 16' N, 13° 21' E), Potenza River, ten miles from Macerata, Province of Rome, Italy Recorded, 1846, L'Institut, T 14, p 340	2	11
469	1838, July 22	<b>MONTLIVAUT</b> —White Chondrite Cw Val Cul de Four (47° 40' N, 1° 25' E), Départe- ment de Loir-et-Cher, France Described, Daubrée, 1873, Comptes Rendus, T 76, pp 314, 315	3	5
470	1808	<b>MOORADABAD</b> —White Chondrite Cw Mooradabad (28° 36' N, 78° 45' E), Northwestern Provinces, India Recorded, 1828, Edinburgh Jour Science, p 172, Jul, 1828	1	1

No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
471	1810, Aug	<b>MOORESFORT</b> —Spherulitic Chondrite, brecciated Ccb Moorefort (57° 27' N, 8° 17' W), County of Tipperary, Ireland Described, Higgins, 1811, Philos, Magaz, Vol 38, pp 262-268	13	30
472	1826, May 19	<b>MORDVINOVKA</b> —White Chondrite Cw Mordvinovka (48° 32' N, 35° 52' E), thirty miles southeast of Pavlograd, Government of Ekaterinoslaw, Southern Russia Described, Arch des Découvertes, 1826, p 186	87	129
473	1875, Sept	<b>MORNANS</b> —Gray Chondrite, veined Cga Mornans (44° 36' N, 5° 8' E), Département de la Drôme, France Described, Gregory, 1887, Geol Mag, Ser 3, Vol 4, Nr 12	12	12
474	1868, Dec 22	<b>MOTEEKA-NUGLA</b> —Crystalline Chondrite Ck Biana District (27° 15' N, 77° 32' E), State of Bhurtpore, Rajputana States, India Described, 1880, Popular Guide to Geol Collections in Indian Museum, Calcutta	7	12
475	1868, Feb 29	<b>MOTTA DI CONTI</b> —Spherulitic Chondrite Cc Motta di Conti (45° 8' N, 77° 22' E), and vicinity, District of Casale, Province of Piedmont, Italy Described, Gouau, Bertolio, Zannetti e Musso, 1868, Sopra gli Aeroliti caduti il giorno 29 febbraio, 1868, nel territorio di Villanova e Motta dei Conti, Piemonte, circondario di Casale, Torino, 1868	67	67
476	1899, Jan 25	<b>MOUNT ZOMBA</b> —White Chondrite, veined Cwa Zomba (15° 6' S, 35° 26' E), Nyassa Land, British Central Africa Main mass in British Museum, London	18	18
477	1902, July 17	<b>MOUNT BROWNE</b> —Spherulitic Chondrite Cc Mount Browne (29° 42' S, 142° 0' E), Evelyn County, New South Wales, Australia Described, Card, 1903, Rec Geol Survey of New South Wales, Vol 7, Pt 3, p 218	226	226
478	1865, Sept 21	<b>MUDDOOR</b> —Spherulitic Chondrite Cc Muddoor (12° 37' N, 77° 6' E), near Annay Doddi, State of Mysore, Madras Presidency, India Described, Bowring, 1865, Proc Asiatic Soc of Bengal, p 195	6	10
479	1875, April 24	<b>NAGERIA</b> — Nageria (27° 8' N, 78° 5' E), District of Agra, Northwestern Provinces, India Recorded, Medlicott, 1876, Proc Journal Asiatic Soc, pp 222, 223	2	2

## WARD-COONLEY COLLECTION OF METEORITES

No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
480	1895, May 9	<b>NAGY-BOROVE</b> —Gray Chondrite Cg Nagy-Borove (49° 2' N, 19° 30' E), Liptoer Comitat, Hungary Recorded, Brezina, 1895, Wiener Sammlung, p 307	184	210
481	1886, Jan 27	<b>NAMMIANTHAL</b> —Spherulitic Chondrite, veined Cca Nammianthal (11° 17' N, 79° 12' E), District of South Arcot, Madras Presidency, India Described, Medicott, 1886, Rec Geol Surv of India, Vol 19, p 268	64	101
482	1825, Feb 25	<b>NANJEMOY</b> —Spherulitic Chondrite Cc Nanjemoy (38° 25' N, 77° 12' W), Charles County, Maryland, U S A Described, Carver, 1825, Am Jour Science, Ser 1, Vol 9, pp 351-353	82	82
483	1890, June 6	<b>NAWAPALI</b> —Carbonaceous Chondrite K Nawapali (21° 30' N, 84° 10' E), Sambalpur Dis- trict, Central Provinces, India Recorded, Fedden, 1901, Guide to Geol Collect, in Indian Museum, Calcutta	2	2
484	1864, April 12	<b>NERFT</b> —Intermediate Chondrite, veined Cia Manor of Nerft (56° 10' N, 25° 20' E), and vicinity, Province of Kurland, Baltic Russia Described, Grewingk and Schmidt, 1864, Arch fur Naturk Liv Ehst u Kurl, Ser 1, Vol 3, p 554	62	83
485	1897	<b>NESS COUNTY</b> —Intermediate Chondrite, brec- ciated Cib Kansada, Franklinville, Wellmansville (38° 20' N, 99° 37' W), and other localities in Ness County, Kansas, U S A Described, H L Ward, Am Jour Science, Ser 4, Vol 7 p 233	3450	13267
486	1860, May 1	<b>NEW CONCORD</b> —Intermediate Chondrite, veined Cia New Concord (39° 58' N, 81° 44' W) and vicinity, Guernsey County, Ohio, U S A Described, Andrews, Evans, Johnson and Smith, 1860, Am Jour Science, Ser 2, Vol 30, pp 103-111	3258	4257
487	1883, Oct 3	<b>NGAWI</b> Ccn Gentoeng (7° 23' S, 111° 25' E) and vicinity Department of Ngawi, Residency of Madioen, Central Java Described, v Baumhauer, 1884, Arch Néerl des Sciences exactes et naturelles, Vol 19, Part II, pp 175-185	9	10



No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
488	1823, Aug 7	<b>NOBLEBOROUGH</b> —Howardite Ho Near Nobleborough (44° 4' N, 69° 28' W), Lincoln County, Maine, U S A Described, Cleaveland, 1824, Am Jour Science, Ser 1, Vol 7, pp 170, 171	19	19
489	1879, July 1	<b>NOGOYA</b> —Carbonaceous Chondrite K Nogoya, near Concepcion (32° 24' S, 59° 46' W), Province of Entre Rios, Argentina Described, Websky, 1882, Stitzber Berlin Akad, 1882, pp 395, 396	10	10
490	1886, Sept 22	<b>NOWO-UREI</b> —Ureilite U Nowo-Urei (54° 32' N, 43° 41' E) and vicinity, Government of Penza, Province of Kazan, Russia Recorded, von Jerofeieff and von Latschnoff, 1887, Nature, Vol 37, pp 110, 111	49	49
491	1851, Nov 5	<b>NULLES</b> —Gray Chondrite, brecciated Cgb Nulles (41° 38' N, 0° 45' W) and vicinity, thirty- two miles northwest of Tarragona, Province of Tarragona, Spain Described, Luis de la Escosura, 1852, Revista Minera, Vol 3, pp 246, 247	3	8
492	1895	<b>OAKLEY</b> —Crystalline Chondrite Ck Fifteen miles southwest (38° 55' N, 101° 0' W) of Oakley, Logan County, Kansas, U S A Described, Preston, 1900, Am Jour Science, Ser 4, Vol 9, pp 410-412	6579	8910
493	1871	<b>OCZERETNA</b> —Gray Chondrite, veined Cga Oczeretna (49° 14' N, 29° 3' E), near Lipowitz, Government of Kief, Southern Russia Recorded, Brezina, 1885, Wiener Sammlung, p 182	3	3
494	1855, May 11	<b>OESEL</b> —White Chondrite Cw Estate of Kaande (58° 30' N, 22° 2' E), Bay of Piddul, Island of Oesel, Province of Livonia, Baltic Russia Described, Goebel, 1856, Arch Naturk Liv Ehst u Kurl, Vol 1, pp 477-482	47	73
495	1730	<b>OGI</b> —White Chondrite Cw Temple of Tukuchi-in Gomado (about 33° 10' N, 130° 0' E), Ogi, Province of Hizen, Japan Described, Divers, 1882, Transact Asiatic Soc of Japan, Vol 10, Pt 2, p 199	22	22
496	1857, Mch 11	<b>OHABA</b> —Gray Chondrite, veined Cga Veresegyhaza (46° 4' N, 23° 50' E), near Ohaba, District of Blasendorf, Province of Transyl- vania, Austria Described, Neugeboren, 1857, Verhd und Mittheil des Siebenb Vereins fur Naturw., Bd 8, p 229, Hermanstadt	6	6

No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
497	1833, Dec 22	<b>OKNINY</b> —Gray Chondrite, brecciated Cgb Okanninach (50° 6' N, 25° 40' E), District of Kremenetz, Government of Volhynia, Russia Described, Wtorschetzku, 1842, Schriften der Russ K Ges fur das ges Min Bd 1, Pt 2, pp 72, 73	10	10
498	1864, May 14	<b>ORGUEIL</b> —Carbonaceous Chondrite K Orgueil (43° 44' N, 1° 24' E) and vicinity, Départe- ment de Tarn-et-Garonne, France Described, Rose, 1863, Meteoriten, pp 126, 156	32	62
499	1868, July 11	<b>ORNANS</b> —Ornansite Cco Lavaux (47° 6' N, 6° 9' E), near Ornans, Départe- ment du Doubs, France Described, Pisani, 1868, Comptes Rendus, Vol 67, pp 663-665	49	62
500	1872, Aug 31	<b>ORVINIO</b> —Orvinite Co Orvinio (42° 8' N, 12° 57' E), and vicinity, Prov- ince of Perugia, Italy Described, Ferrari, 1872, Ricerche fisico-astrono- miche intorno all, uranolito cadutu nell' agro Romano il 31 di Agosto, Roma	21	38
501	1886, Oct 26	<b>OSHIMA</b> — Oshima Mura (about 31° 3' N, 130° 0' E), Ysa Gori, Province of Satsuma, West Coast of Japan Main mass in Imperial Musuem of Uyeno, Japan Undescribed	104	104
502	1896, April 9	<b>OTTAWA</b> —Howarditic Chondrite Cho Ottawa (38° 37' N, 95° 18' W), Franklin County, Kansas, U S A Described, 1896, Ottawa Weekly Times, April 16th, 1896	39	111
503	1881, June 18	<b>PACULA</b> —White Chondrite, brecciated Cwb Three miles east of Pacula (21° 3' N, 99° 18' W), District of Jacala, State of Hidalgo, Mexico Described, Castillo, 1889, Catalogue Descr des Météorites du Mexique, pp 12, 15	92	180
504	1901	<b>PALEZIEUX</b> —Spherulitic Chondrite, crystalline Cck Forest of Chervettaz (46° 33' N, 6° 50' E), near Palézieux, Canton of Lausanne, Switzerland Recorded, Renevier, 1901, Rapport de Musée Geologique à Lausanne, Suisse	26	26
505	1857, Feb 28	<b>PARNALLEE</b> —Gray Chondrite, veined Cga Parnallee (9° 14' N, 78° 21' E) and vicinity, six- teen miles south of Madura, Presidency of Madras, India Described, Taylor, 1857, Trans Geog Soc, Bom- bay	486	665

No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
506	1882, Aug 2	<b>PAVLOVKA</b> —Howardite Ho Pavlovka (51° 36' N, 42° 20' E), near River Karai, District of Balaschew, Government of Sara- towsk, Russia Described, Tschernyschow, 1883, Zeitschr d d Geol Ges, Vol 35, pp 190-192	94	167
507	1855, Aug 5	<b>PETERSBURG</b> —Howardite Ho Two miles west of Petersburg (35° 20' N, 86° 38' W), Lincoln County, Tennessee, U S A Described, Smith, 1855, in Safford's Report on Geology of Tennessee, Nashville, Tennessee	195	224
508	1887, Sept 12	<b>PHU LONG</b> —Spherulitic Chondrite, veined Cca Phu Long (11° 30' N, 108° 30' E), Canton of Binh Chanh, French Indo-China, Asia Described, Delauney, 1887, Comptes Rendus, T 105, p 1294	11	11
509	1863, Aug 8	<b>PILLISTFER</b> —Crystalline Chondrite Ck Pillistfer (58° 40' N, 25° 44' E), and vicinity, Dis- trict of Fellin, Province of Kurland, Western Russia Described, Rose, 1863, Mon-Ber Berlin, Akad, pp 441-443	35	68
510	1887	<b>PIPE CREEK</b> —Crystalline Chondrite, veined Cka Near Pipe Creek (29° 43' N, 98° 56' W), Brandera County, thirty-five miles southwest of San Antonio, Texas, U S A Described, Ledoux, 1888-89, Trans of New York Acad of Science, Vol 8, pp 186, 187	3596	3965
511	1882, Aug 29	<b>PIRGUNJE</b> —White Chondrite, veined Cwa Pirgunje (25° 36' N, 88° 40' E), Dinagepur, Presi- dency of Bengal, India Recorded, Hauer, 1892, Ann Hofmuseum, Bd 7, p 73	4	4
512	1884, Feb 9	<b>PIRTHALLA</b> —Spherulitic Chondrite, brecciated Ccb District of Hissar (29° 35' N, 79° 0' E), Punjab Provinces, India Described, Medlicott, 1885, Rec Geol Surv of India, Vol 18, p 148	1	1
513	1723, June 22	<b>PLOSKHKOWITZ</b> —Spherulitic Chondrite, brecciated Ccb Ploschkowitz (50° 41' N, 14° 39' E) and vicinity, District of Bunzlau, Bohemia Described, Rost, 1725, Sammlung von Natur und Medecin, etc, Geschichten (Breslauer Samml), 31 Versuch, Winter Quartal, 1725, pp 44-47	6	6
514	1868, June 30	<b>PNOMPEHN</b> —White Chondrite Cw Pnompehn (11° 38' N, 104° 52' E), State of Cam- bodia, French Indo-China Recorded, 1868, Report on Luminous Meteors, British Assoc Adv Science, pp 276, 277	1	1

No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
515	1819, Oct 13	<b>POHLITZ</b> —White Chondrite, veined Cwa Pohlitz (50° 57' N, 12° 2' E), near Gera, Principality of Reuss-Gera, Germany Described, Braun, 1819, <i>Gilb Ann</i> , Vol 63, pp 217-228	5	11
516	1893	<b>PRAIRIE DOG CREEK</b> —Spherulitic Chondrite, crystalline Cck Prairie Dog Creek (39° 42' N, 100° 24' W), Decatur County, Kansas Described, Weinschenk, 1895, <i>Tschermak's Min und Petrog Mittheil</i> , Wien, 1894-95, Vol 14, pp 473-475	157	157
517	1893, Feb 13	<b>PRICETOWN</b> —White Chondrite Cw Pricetown (33° 11' N, 83° 44' W), Highland County, Ohio, U S A	4	4
518	1863, Mch 16	<b>PULSORA</b> —Intermediate Chondrite, brecciated Ckb Pulsora (23° 22' N, 75° 7' E), six miles northeast of Rutlam, State of Indore, India Described, Buchner, 1869, <i>Vierter Nachtrag</i> , <i>Pogg Ann</i> , Bd 136, pp 454, 455	5	5
519	1868, Jan 30	<b>PULTUSK</b> —Gray Chondrite, brecciated Cgb Pultusk (52° 42' N, 21° 23' E), and vicinity, Province of Poland, Russia Described, Szymanski, 1868, <i>Brief Mitt N J</i> , 1868, p 326	9521	15442
520	1857, Dec 27	<b>QUENGGOUK</b> —Spherulitic Chondrite Ce Quenggouk (17° 20' N, 96° 28' W), near Bassein, Province of Lower Burmah, India Described, Haidinger, 1860, <i>Sitzber Wien Akad</i> , Vol 41, pp 750, 751	302	302
521	1851	<b>QUINCAY</b> —Gray Chondrite, brecciated Cgb Quincay (46° 25' N 0° 24' E), Département de la Vienne, France Described, Meunier, 1884, <i>Meteorites</i> , p 241	8	11
522	1878, Nov 20	<b>RAKOWKA</b> —Intermediate Chondrite Ci Rakowka (about 54° 10' N, 37° 41' E), Government of Tula, Russia Described, Trautschold, 1879, <i>Brief Mitt N J</i> , 1879, pp 144, 145	163	163
523	1824, June 15	<b>RENAZZO</b> —Black Chondrite Cs Renazzo (44° 47' N, 11° 18' E), near Cento, Province of Ferrara, Italy Described, Orioli, 1824, <i>Nuova Collezione di opuscoli scientifici di Bologna</i> , Vol 3, p 151	4	7

No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
524	1828, June 4	<b>RICHMOND</b> —Spherulitic Chondrite crystalline Cck Seven miles southwest (37° 29' N, 77° 28' W) of Richmond, Henrico County, Virginia, U S A Described, Cocke, 1829, Am Jour Science, Ser 1, Vol 15, pp 195, 196	10	15
525	1876, Dec 21	<b>ROCHESTER</b> —Spherulitic Chondrite Cc Three miles northwest of Rochester (41° 5' N, 86° 13' W), Fulton County, Indiana, U S A Described, Newton, 1877, Am Jour Science, Ser 3, Vol 13, pp 166, 167	1	2
526	1871	<b>RODA</b> —Rodite Ro Four miles from Huesca (42° 7' N, 0° 18' W), Province of Huesca, Spain Described, Pisan, 1874, Comptes Rendus, T 79, pp 1507-1509	25	25
527	1866	<b>RUSHVILLE</b> —Gray Chondrite Cg Five miles south of Brookville (39° 22' N, 85° 3' W), Franklin County, Indiana, U S A Recorded, Wulff, 1897, Die Meteoriten in Sammlungen, p 398 Undescribed	15	23
528	1863, Jan 28	<b>SAINT CAPRAIS DE QUINSAC</b> —Intermediate Chondrite Ci Saint Caprais de Quinsac (44° 40' N, 0° 30' W), Département de la Gironde, France Described, Lespault et L Forquignon, 1883, Comptes Rendus, T 97, pp 1022, 1023	4	4
529	1855, June 7	<b>SAINT DENIS WESTREM</b> —Spherulitic Chon- drite, veined Cca Saint Denis Westrem (51° 4' N, 3° 40' E), near Ghent, Belgium Described, Duprez, 1855, Bull Acad Belgique, Vol 22, pp 54-58	7	13
530	1866, May 30	<b>SAINT MESMIN</b> —Intermediate Chondrite, brec- ciated Cib Saint Mesmin (48° 26' N, 3° 55' E), near Troyes, Département de l'Aube, France Described, Ray, 1866, Mém Soc Académique de l'Aube, Vol 30	23	42
531	1898, Nov 15	<b>SALINE</b> —Spherulitic Chondrite, crystalline Cck Saline Township (39° 22' N, 100° 27' W), Sheridan County, Kansas, U S A Described, Farrington, 1902, Science, Vol 16, pp 67, 68	1445	2489
532	1798, Mch 12	<b>SALLES</b> —Intermediate Chondrite, veined Cia Salles (46° 3' N, 4° 37' E), near Lyon, Départe- ment du Rhone, France Described, de Drée, 1802, Jour Phys, T 56, pp 383-389	4	13

No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
533	1869	<b>SALT LAKE CITY</b> —Gray Chondrite, brecciated Cgb Between Salt Lake City and Echo (40° 58' N, 111° 25' W), Utah, U S A Described, Dana and Penfield, 1886, Am Jour Science, Ser 3, Vol 32, pp 226-229	7	7
534	1887	<b>SAN EMIGDIO</b> —Spherulitic Chondrite Cc San Emigdio Range, San Bernardino County, California, U S A Described, Merrill, 1888, Proc U S National Museum, pp 161-167	24	27
535	1887	<b>SAN PEDRO SPRINGS</b> —White Chondrite Cw San Pedro Springs (29° 27' N, 98° 27' W), near San Antonio, Bexar County, Texas, U S A Recorded, Brezina, 1896, Wiener Sammlung, p 306	3	3
536	1868, Sept 7	<b>SAUGUIS</b> —White Chondrite, veined Cwa Sauguis-Saint-Etienne (43° 10' N, 1° 21' W), Département des Basses-Pyrénées, France Described, Daubrée, 1868, Comptes Rendus, T 67, pp 873-877	3	11
537	1894, July 27	<b>SAWTSCHENSKOJE</b> —Spherulitic Chondrite, crystalline Cck Sawtschenskoje (46° 52' N, 29° 36' E), District of Tiraspol, Government of Cherson, Russia Described, Prendel, 1895, Katalog der Meteoriten Sammlung in Odessa, Feb, 1895	25	25
538	1715, April 11	<b>SHELLIN</b> —Intermediate Chondrite, veined Cia Schellin (53° 20' N, 15° 0' E), near Stargard, Province of Pomerania, Prussia Described, Gilbert, 1822, Gilb Ann, Bd 71, pp 213-223	1	1
539	1814, Jan 23	<b>SCHOLOKOV</b> —White Chondrite, veined Cwa Scholokov (48° 15' N, 36° 0' E), Government of Ekatermoslaw, Russia Recorded, Chladni, 1815, Neues Verzeichniss, Gilb Ann, Bd 50, p 256	5	5
540	1846, Dec 25	<b>SCHONENBERG</b> —White Chondrite, veined Cwa Schonenberg (48° 9' N, 10° 26' E), northwest of Pfaffenhausen, Province of Schwaben, Bavaria Described, Augsburger Allg Zeitung vom 1 Jan, 1847	24	24
541	1871, May 21	<b>SEARSMONT</b> —Spherulitic Chondrite Cc Searsmont (44° 22' N, 69° 12' W), Waldo County, Maine, U S A Described, Shepard, 1871, Am Jour Science, Ser 3, Vol 2, pp 133-136	5	5

No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
542	1853, Mch 6	<b>SEGOWLIE</b> —Crystalline Chondrite Ck Fourteen miles east of Bettiah (26° 45' N, 84° 45' E), District of Chumparun, State of Bengal, India Described, Sherwill, 1854, Journ Asiatic Soc of Bengal, Vol 23, pp 746, 747	166	166
543	1773, Nov 13	<b>SENA</b> —Gray Chondrite, brecciated Cgb Sena (41° 36' N, 0° 0' E), District of Sigena, Province of Huesca, Spain Described, Proust, 1803, Journ Phys, Vol 60, pp 185-202	3	4
544	1865, Aug 25	<b>SENHADJA</b> —White Chondrite Cwa Senhadja (36° 15' N, 3° 42' E), near Aumale, Brook of Oued Soufflat, Province of Alger, Algeria, North Africa Described, Daubrée, 1866, Comptes Rendus, T 62, pp 72-78	282	282
545	1818, June	<b>SERES</b> —Gray Chondrite Cg Seres (41° 5' N, 23° 34' E), Province of Macedonia, Turkey Described, Stedler, 1847, Oestreich Bl fur Lit, Nr 86, p 343	39	46
546	1862, Oct 1	<b>SEVILLA</b> —Howarditic Chondrite Cho Sevilla (37° 22' N, 5° 52' W), Province of Sevilla, Spain Described, Buchner, 1865, Zweiter Nachtrag Pogg Ann, Bd 124, p 591	1	1
547	1874, May 11	<b>SEVRUKOWO</b> —Black Chondrite Cs Sevrukowo (50° 9' N, 36° 34' E), District of Belgorod, Government of Kursk, Central Russia Described, Daubrée, 1875, Comptes Rendus, T 81, pp 661-663	140	191
548	1850, Nov 30	<b>SHALKA</b> —Chladnite Chl Shalka (23° 8' N, 87° 24' E), near Bishnupur, District of Bankoora, Province of Bengal, India Described, Piddington, 1851, Journ Asiat Soc of Bengal, Vol 20, pp 299-307	11	20
549	1865, Aug 25	<b>SHERGOTTY</b> —Shergottite She Umjhiawar (24° 33' N, 84° 50' E), Shergotty District, Province of Bengal, India Described, Bayley and Costley, 1866, Proc Asiat Soc of Bengal, pp 193-195	46	46
550	1863, Aug 11	<b>SHYTAL</b> —Intermediate Chondrite, brecciated Cib Shytal (24° 20' N, 90° 24' E), near Tistra River, in Madhupur Jungles, Province of Bengal, India Described, Haidinger, 1863, Sitzber Wiener Akad der Wissensch, Bd 48, T 2, pp 595-600	9	12

No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
551	1794, June 16	<b>SIENA</b> —Howarditic Chondrite Cho Campagna Sanese (43° 7' N, 11° 36' E) and vicinity, near Siena, Province of Tuscany, Italy Described, Domenico Tata, 1794, Antologia Romano, T 21, p 94	13	13
552	1901, June 10	<b>SINDHRI</b> —Spherulitic Chondrite Cc Sindhri (18° 10' N, 73° 56' E), near Khipro Jaluca, District of Ihar and Parkar, Presidency of Bombay, India Main mass in Indian Museum, Calcutta	435	435
553	1875, Mch 4	<b>SITATHALI</b> —Howarditic Chondrite Cho Sitathali (26° 34' N, 76° 40' E), and vicinity, near Nurrah, States of Rajputana, India Described, Medicott, 1876, Proc Asiatic Soc of Bengal, pp 115, 116	7	14
554	1848, Dec 27	<b>SKI</b> —White Chondrite, veined Cwa Ski (59° 56' N, 11° 18' E), near Krogstad, Amt Akershuus, Norway Described, Ditten, 1855, Jour fur Pract Chemie, Bd 64, pp 121-123	1	1
555	1868, May 22	<b>SLAVETIC</b> —Gray Chondrite, brecciated Cgb Slavetic (45° 41' N 15° 36' E), six miles north- west from Jaska, Province of Croatia, Austria Described, v Haidinger 1868, Sitzber Wien Akad, Vol 58, pp 162-168	11	11
556	1818, Aug 10	<b>SLOBODKA</b> —Spherulitic Chondrite Cc Slobodka (54° 48' N, 35° 10' E), District of Juch- now, Government of Smolensk, Central Russia Described, Chladni, 1819, Vierte Fortsetzung, Gulb Ann, Bd 6C, p 254	26	26
557	1877, Oct 13	<b>SOKOBANJA</b> —Spherulitic Chondrite Cc Banja (43° 41' N, 21° 34' E), and vicinity, near Alexinac, Kingdom of Servia Described, Doll, 1877, Verh der k k geol Reich- sanst, Nr 16, pp 283-287	243	393
558		<b>SONE MURA</b> — Sone Mura (about 35° 10' N, 135° 20' E), Province of Tampa, Japan	2	2
559	1876, June 28	<b>STALLDALEN</b> —Gray Chondrite, brecciated Cgb Ställdalen (59° 56' N, 15° 2' E), and vicinity, near Kopparberget, Lan of Orebro, Sweden Described, v Nordenskiöld, 1877, Foredrag i Mineralogi vid Akademiens årshogtid den 3 April, Stockholm, 1877	343	343
560	1808, May 22	<b>STANNERN</b> —Eukrite Eu Stannern (49° 18' N, 15° 36' E) and vicinity, District of Iglau, Province of Moravia, Austria Described, v Jacquen, 1808, Gulb Ann, Vol 28, p 491	409	753



## AEROLITES

65

No	Found, Noticed or Describd	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
561	1857, Mch 24	<b>STAVROPOL</b> —Crystalline Chondrite Ck Petrowsk (45° 4' N, 41° 58' E), near Stavropol, Government of Stavropol, Northern Caucasia, Russia Described, Abich, 1860, Bull de l'Acad Imp des Sciences de St Petersburg, T 2, pp 404, 422	6	6
562	1865, Jan 19	<b>SUPUHEE</b> —Gray Chondrite, brecciated Cgb Near Supuhee (26° 17' N, 83° 23' E), fourteen miles south-southwest of Padrauna, District of Gorakhpur, Northwestern Provinces, India Described, Buchner, 1869, Vierter, Nachtrag, Pogg Ann, Bd 136, p 455	13	18
563	1753, June 3	<b>TABOR</b> —Spherulitic Chondrite, brecciated Ccb Tabor (49° 21' N, 14° 23' E) and vicinity, District of Bechin, Bohemia Described, Stepling, 1754, De pluvia lapidea Anni 1753 ad Strkow et ejus Causis meditatio Typis Francisci Ignati Kirchner Prag 1754, 33 Seiten	79	136
564	1877, Aug 30	<b>TABORY</b> —Spherulitic Chondrite, brecciated Ccb Tabory (57° 42' N, 55° 16' E), and vicinity, Dis- trict of Ochansk, Government of Perm, East Russia Described, Daubrée, 1887, Comptes Rendus, T 105, pp 987, 988	7019	9476
565	1867, June 9	<b>TADJERA</b> —Tadjerite Ct Plam of Tadjera (36° 20' N, 5° 30' E), ten miles southwest of Setif, Province of Constantine, Algeria, Africa Described, Augeraud, 1867, Comptes Rendus, T 65, pp 240-242	5	7
566	1875	<b>TALTAL</b> — East of Taltal (25° 27' S, 70° 36' W), in Desert of Atacama, Chili	16	16
567	1872, June 28	<b>TENNASILM</b> —Spherulitic Chondrite, veined Cca Farm of Sikkensare (58° 44' N, 24° 54' E), Dis- trict of Jerwew, Province of Ehstland, Baltic Provinces, Russia Described, v Schilling, 1873, Arch fur Naturk Liv Ehst u Kurl, Bd 8, pp 1-20	63	63
568	1878, July 15	<b>TIESCHITZ</b> —Spherulitic Chondrite Ce Near Tieschitz (49° 9' N, 17° 9' E), District of Prerau, Province of Moravia, Austria Described, Tschermak, 1878, M P M, Bd 1, p 289	27	55
569	1807, Mch 25	<b>TIMOCHIN</b> —Spherulitic Chondrite Cc Timochin (54° 58' N, 35° 10' E), District of Juch- now, Government of Smolensk, Central Russia Described, Gilbert, 1807, Gulb Ann, Bd 26, pp 238, 239	37	55

No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
570	1869, Sept 19	<b>TJABE</b> —Crystalline Chondrite Ck Tjabe (7° 6' S, 111° 25' E), District of Padangan, Residency of Rembang, Island of Java Described, v Baumhauer, 1871, Arch Néerl, T 6, Nr 4, pp 305-325	47	70
571	1879, Sept 17	<b>TOMATLAN</b> —Spherulitic Chondrite Cc Haciende d'El Garganitello (20° 17' N, 105° 12' W), eight miles northwest of Tomatlan, State of Jalisco, Mexico Described, Shepard, 1885, Am Jour Science, Ser 3, Vol 30, pp 105-108	4	8
572	1863	<b>TOMHANNOCK</b> —Gray Chondrite, brecciated Cgb Tomhannock Creek (42° 52' N, 73° 36' W), Rens- selaer County, New York, U S A Described, Bailey, 1887, Am Jour Science, Ser 3, Vol 34, pp 60-62	18	29
573	1812, April 12	<b>TOULOUSE</b> —Intermediate Chondrite, veined Cia Toulouse (43° 47' N, 1° 9' E) and vicinity, Canton of Grenade, Département de la Haute Garonne, France Described, Gilbert, 1812, Gilb Ann, Bd 41, pp 445-449	14	26
574	1863, Dec 7	<b>TOURINNES-LA-GROSSE</b> —White Chondrite Cw Tourinnes-la-Grosse (50° 49' N 4° 56' E), near Louvain, Belgium Described, Van Beneden, 1863, Bull Acad Roy Belgique, T 16, p 621	14	26
575	1890	<b>TRAVIS COUNTY</b> —Black Chondrite Cs Travis County (30° 20' N, 97° 29' W), Central Texas, U S A Described, Eakins, 1890, Am Jour Science, Ser 3, Vol 39, p 59	7	7
576	1856, Nov 12	<b>TRENZANO</b> —Spherulitic Chondrite, veined Cca Ten miles (45° 28' N, 10° 2' E), west-southwest of Brescia, Province of Brescia, Italy Described, Curioni, 1860, Atti R Instit Lomb di Scienze, Lettere et Arti, Milano, 1860, T 1, pp 357-364	31	54
577	1884, May 20	<b>TYSNES</b> —Gray Chondrite, brecciated Cgb Estate of Midtvaage (62° 2' N, 5° 30' E), Island of Tysnes, Hardanger Fjord, Amt Bergenhus, Norway Described, Reusch, 1886, Neues Jahrbuch B B IV, pp 473-486	428	428
578	1840, June 12	<b>UDEN</b> —White Chondrite, brecciated Cwb Staartje (51° 40' N, 5° 35' E), near Volkel, District of Uden, Province of North Brabant, Holland Described, van Rees, 1843, Pogg Ann, Bd 59, pp 349, 350	3	3

## AEROLITES

67

No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
579	1866, April	<b>UDIPI</b> —Gray Chondrite, veined Cga Udipi (13° 40' N, 74° 50' E), District of South Canara, Malabar, Coast, South India Recorded, Meunier, Les Météorites, p 209	16	24
580	1822	<b>UMBALLA</b> —Gray Chondrite, veined Cga Forty miles west (30° 22' N, 76° 19' E) of Umballa, Punjab States, India Described, Atkinson, 1859, Jour Asiat Soc of Bengal, Vol 28, p 260	4	9
581	1843, June 2	<b>UTRECHT</b> —Spherulitic Chondrite, veined Cca Blaauw Capel (52° 8' N, 5° 8' E), near Utrecht, Province of Utrecht, Holland Described, Quetelet, 1843, Comptes Rendus, T 16, pp 1311, 1312	109	109
582	1876, June 19	<b>VAVILOVKA</b> —Rodite Ro Vavilovka (46° 57' N, 32° 32' E), Government of Cherson, South Russia Described, Prendel, 1877, Mém de la Soc Nation des Sciences Nat, Cherbourg, T 21, p 205	126	148
583	1865, Mch 26	<b>VERNON COUNTY</b> —Crystalline Chondrite, veined Cka Vernon County (43° 30' N, 91° 10' W), Wisconsin, U S A Described, Smith, 1875, Am Jour Science, Ser 3, Vol 10, p 314	22	22
584	1874, May 20	<b>VIRBA</b> —White Chondrite, veined Cwa Virba (44° 0' N, 22° 52' E), near Widdin, Bulgaria Described, Daubrée, 1874, Comptes Rendus, T 79, pp 276, 277	2	2
585	1831, May 18	<b>VOUILLE</b> —Intermediate Chondrite, veined Cia Vouille (46° 37' N, 0° 8' E), near Portiers, Départe- ment de la Vienne, France Described, 1831, Ann Chim Phys, T 47, p 442	453	668
586	1873	<b>WACONDA</b> —Spherulitic Chondrite, brecciated Ccb Two miles from Waconda (39° 20' N, 98° 10' W), Mitchell County, Kansas, U S A Described, Shepard, 1876, Am Jour Science, Ser 3 Vol 11, p 473	870	1300
587	1864, Dec 4	<b>WAIRARAPA</b> —Carbonaceous Chondrite K Wairarapa (39° 22' S, 175° 53' E), five miles from Turakina, Province of Wellington, New Zealand Described, Haidinger, 1865, Sitzber Wiener Akad der Wissensch, Bd 52, Pt 2, pp 151-153	20	20
588	1877, Jan 3	<b>WARRENTON</b> —Ornansite Cco Five miles from Warrenton (38° 44' N, 91° 12' W), Warren County, Missouri, U S A Described Smith, 1877, Am Jour Science, Ser 3, Vol 13, p 243	117	117

## WARD-COONLEY COLLECTION OF METEORITES

No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
589	1843, Nov 12	<b>WERCHNE TSCHIRSKAJA</b> —Spherulitic Chondrite, veined Cca Werchne Tschirskaja (48° 25' N, 43° 10' E), Province of the Don Cossacks, South Russia Described, Borissiak, 1847, Bull de l'Acad Imp des Sciences de St Petersburg, T 5, pp 196, 198	8	11
590	1831, Sept 9	<b>WESSELY</b> —Gray Chondrite, veined Cga Estate of Wessely (48° 54' N, 17° 21' E), near Znorow, District of Hradisch, Province of Moravia, Austria Described, von Schreibers, 1832, Baumgartners Zeitschr fur Physik und verw Wissensch, Bd 1, pp 1, 239	4	4
591	1807, Dec 14	<b>WESTON</b> —Spherulitic Chondrite, brecciated Ceb Weston (41° 13' N, 73° 27' W) and vicinity, Fairfield County, Connecticut, U S A Described, Silliman and Kinsley, 1809, Trans Am Philos Soc Vol 6, pp 323, 325	79	111
592	1785, Feb 19	<b>WITMESS</b> —Spherulitic Chondrite Ce Forest of Witmess (48° 52' N, 11° 10' E), six miles southwest of Eichstadt, Province of Mittel Franken, Bavaria Described, Stutz, 1790, Bergbaukunde, Bd 2, pp 398, 399	13	13
593	1795, Dec 13	<b>WOLD COTTAGE</b> —White Chondrite, veined Cwa Wold Cottage (54° 9' N, 0° 24' W), County of York, England Described, Topham, Gentleman's Magazine, Feb 8, 1796	10	15
594	1852, Jan 23	<b>YATOOR</b> —Spherulitic Chondrite Ce Yatoor (14° 22' N, 18° 0' E), near Nellore, Presidency of Madras, India Described, Haidinger, 1861, Sitzber Wien Akad, Vol 44, pp 73, 74	27	27
595	1877, June 17	<b>YODZE</b> —Howardite, breccialike IlOb Yodze (54° 44' N, 24° 22' E), near Ponevej, Government of Kovno, Baltic Russia Recorded, von Hauer, 1892, Ann Hofmuseum, Bd 7, p 73	45	15
596	1836, June 12	<b>YONATSU</b> Yonatsu Mura (about 37° 15' N, 139° 10' E), District of Kambara, Province of Echigo, North Japan Main mass (30 kilos) in Imperial Museum of Ueyeno, Japan	39	39

## AEROLITES

69

No	Found, Noticed or Described	NAME OF THE METEORITE, with geographical index of locality	Chief Piece	Total Weight
			Grammes	
597	1818, April 10	<b>ZABORZIKA</b> —White Chondrite, veined Cwa Zaborzika (50° 15' N, 27° 30' E), near River Slutsch, south of Nowgrad-Volhynsk, Govern- ment of Volhynia, West Russia Described, Laugier, 1823, Gilb Ann, Vol 75, pp 264-266	50	72
598	1893, Sept 22	<b>ZABRODJE</b> —Intermediate Chondrite, veined Cia Zabrodje (55° 11' N, 27° 55' E), Government of Wilma, Baltic Russia Described, Melikoff, 1894, Ber d d Chem Ges, Bd 27, pp 1235-1238	4	4
599	1897, Aug 1	<b>ZAVID</b> —Intermediate Chondrite, veined Cia Zavid (44° 33' N, 18° 37' E) and vicinity, near Rozanj, District of Zwarnik, Province of Bosnia, Austria Described, Berwerth, 1901, Wissensch Mittheil aus Bosnien und der Hercegovina, Bd 8, pp 1, 18	384	821
600	1824, Oct 14	<b>ZE BRAK</b> —Spherulitic Chondrite Cc Zebrak (49° 52' N, 13° 55' E), near Horowic, District of Beraun, Bohemia Described, v Martius, 1825, Kastner's Archiv f d gesammte Naturlehre, Bd 30, pp 421, 422	14	14
601	1858, August	<b>ZMENJ</b> —Howardite Achondrite Ho Zmenj, near Stohm (51° 53' N, 26° 40' E), Govern- ment of Minsk, Russia Described, Prendel, Revue des Sciences Nat- urelles, 1892, No 9, pp 323-326	1	1
602	1875, Mch 31	<b>ZSADANY</b> —Spherulitic Chondrite Cc Zsadany (45° 55' N, 21° 14' E) and vicinity, Temesvar Comitatus, Hungary Described, Cohen, 1878, Verhdl des Naturh Med Vereins zu Heidelberg, Bd 2, H 2, pp 1, 10	14	19
603	1899	<b>RANCHO DE LA PRESA</b> —Spherulitic Chondrite Cc Rancho de la Presa (19° 50' N 100° 30' W), Mu- nicipality of Ucareo, District of Zmapecuaro, State of Michoacan, Mexico Original mass in Museum of the Geological Institute, City of Mexico	5	5

## IV ALPHABETICAL LIST OF ALL KNOWN METEORITES,

WITH NOTE OF SUCH SYNONYMS AS HAVE IMPORTANCE

## A

- ABERT IRON** Medium Octahedrite Om  
Locality unknown Found in Col J J  
Abert's collection, National Museum,  
Washington, D C, U S A
- ABO**, 1 40 Stone  
Southwest Finland
- ADALIA**, 1883 Stone Eu  
Konia, Asia Minor
- Adair, Adare **LIMERICK**
- ADARGAS**, 1780 Iron Om  
Sierra de las Adargas, nine leagues south of  
Jimenez, State of Chihuahua, Mexico
- ADMIRE**, 1881 Siderolite Pr  
Fifteen miles west from Osage City, Lyon  
County, Kansas, U S A
- Aeriotopos **BEAR CREEK**
- AGEN**, 1814 Stone Cia  
Département de Lot-et-Garonne, France
- Agen, 1826 **GALAPIAN**
- AGRA**, 1822 Stone Cga  
Kadonah, near Agram, Province of Doab,  
Northern India
- Agram **HRASCHINA**
- Aigle **L'AIGLE**
- Ain, 1753 **LUPONNAS**
- Ainsa **TUCSON**
- AKBURPUR**, 1838 Stone Cgb  
Akburpur, near Cawnpur, N W Provinces,  
India
- Akershuus **SKI**
- ALAIS**, 1806 Stone K  
Alais and vicinity Département du Gard,  
Southern France
- Alastoewa **DJATI-PENGILON**
- Alatyr **NOWO-UREI**
- Albacher Muhle **BITBURG**
- ALBARETO**, 1766 Stone Cc  
Near Modena, Province of Modena, Italy
- Albuquerque **GLORIETA**
- ALDSWORTH**, 1835 Stone Cga  
Aldsworth, near Cirencester, England
- ALEPPO**, 1873 Cwb  
Aleppo, Province of Aleppo, Asia Minor
- ALESSANDRIA**, 1860 Stone Cga  
Valley of San Giuliano Vecchio, Province of  
Alessandria, Italy
- Alexejewka **BACHMUT**
- ALFIANELLO**, 1883 Stone Ci  
Alfinaello, Province of Brescia, Italy
- ALGOMA**, 1887 Iron Om  
Algoma, Kewaunee County, Wisconsin, U  
S A
- Allahabad, 1822 **FUTTEHPOOR**
- ALLEGAN**, 1899 Stone Cco  
Allegan, Allegan County, Michigan U S A
- Allen County **SCOTTSVILLE**
- ALT BIELA**, 1898 Iron Of  
Alt Biela, near Ostrau Moravia, Austria
- Amakaken **CAPERR**
- Amana **ERGHEO**
- Amana **HOMESTEAD**
- Amates **TOLUCA**
- AMATES**, 1889 Iron Om  
Rancho de los Amates, north of Iguala,  
State of Guerrero, Mexico
- AMBAPUR NAGLA**, 1895 Stone Cck  
Sikandra Rao Tahsil, Aligarh District,  
Northwest Provinces, India
- ANDERSON** Prehistoric Siderolite Pk  
Little Miami Valley, Ohio, U S A
- ANDOVER**, 1898 Stone Cc  
Andover, Oxford County, Maine, U S A
- ANGARA**, 1885 Iron Om  
Government of Jeniseisk, East Siberia
- ANGERS**, 1822 Stone Cwa  
Angers, Département du Maine-et-Loire,  
France
- ANGRA DOS REIS**, 1869 Stone A  
Angra dos Reis, Province of Rio Janeiro,  
Brazil
- Antofona **COLLESCIPOLI**
- Antofogasta, 1876 **MANTOS BLANCOS**

Antofogasta, 1896	<b>SAN CRISTOBAL</b>	
<b>APOALA</b> , 1889 Iron	Of	
Apoala, ten miles east of Coixtlahuaca, State of Oaxaca, Mexico		
<b>ARISPE</b> , 1898 Iron	Ogg	
Arispe, State of Sonora, Mexico		
<b>APT</b> Stone	Cga	
Saurette, Département de Vaucluse, France		
<b>ARLINGTON</b> , 1894 Iron	Om	
Arlington, Sibley County, Minnesota		
Arva	<b>MAGURA</b>	
<b>ASCO</b> , 1805 Stone	Cwa	
Asco, Island of Corsica, Mediterranean		
<b>ASHEVILLE</b> , 1839 Iron	Om	
Bards Farm, six miles north of Asheville, Buncombe County North Carolina, U S A		
<b>ASSAM</b> , 1846 Stone	Cgb	
State of Assam, India		
<b>ASSISI</b> , 1886 Stone	Cc	
Torre, near Assisi, Province of Perugia Italy		
Atacama, Pallasit, 1828	<b>IMILAC</b>	
Atacama, Bolivia, 1858	<b>JOEL'S IRON</b>	
Atacama, 1860 Stone	<b>LUTSCHAUNIG</b>	
Atacama, 1874 Iron	<b>CACHIYUYAL</b>	
Atacama, 1861, Siderolite	<b>VACA MUERTA</b>	
<b>AUBRES</b> , 1836 Stone	Bu	
Aubres, Département de la Drôme, France		
<b>AUBURN</b> , 1836 Iron	H	
Auburn, Lee County (formerly Macon County), Alabama, U S A		
Augusta County	<b>STAUNTON</b>	
<b>AUGUSTINOWKA</b> , 1890 Iron	Of	
Augustynowska, Government of Ekaterinos- law, Southern Russia		
Aukoma	<b>PILLISTFER</b>	
Aumale	<b>SENHADJA</b>	
<b>AUMIERES</b> , 1842 Stone	Cwa	
Aumiere, Département de la Lozere, France		
<b>AUSSON</b> , 1858 Stone	Cc	
Aussion, Département de la Haute Garonne, France		
<b>AVILEZ</b> , 1856 Stone	Cc	
Hacienda d'Avilez, State of Durango, Mexico		

## B

<b>BABB'S MILL</b> , 1842 Iron	Db	
Babb's Mill, ten miles north of Greenville, Greene County Tennessee U S A		
<b>BACHMUT</b> , 1814 Stone	Cw	
Alexejewka, near Bachmut, Government of Ekaterinoslaw, Southern Russia		
<b>BACUBIRITO</b> , 1871 Iron	Off	
El Ranchito, seven miles south of Bacu- birito State of Sinaloa, Mexico		
Bajadoz	<b>GUARENA</b>	
Bahia	<b>BENDEGO</b>	
Baird's Farm or Plantation	<b>ASHVILLE</b>	
<b>BALD EAGLE</b> , 1891 Iron	Om	
Bald Eagle Mountain, seven miles south of Williamsport, Pennsylvania, U S A		
Baldohn	<b>MISSHOF</b>	
<b>BALLNOO</b> , 1893 Iron	Off	
Ten miles south of Ballnoo, Murchison River, West Australia		
<b>BANDONG</b> , 1871 Stone	Ro	
Bandong and vicinity, Province of Preanger, Java		
<b>BARBOTAN</b> , 1790 Stone	Cga	
Barbotan and vicinity, Département des Landes, France		
Barcelona, 1861	<b>CANELLAS</b>	
Baré	<b>MOCS</b>	
<b>BAREA</b> , 1842 Siderolite	M	
Barea, Province of Logrono, Spain		
<b>BARNTRUP</b> , 1886 Stone	Cia	
Forest of Krahenholz north of Barntrup, Principality of Lippe, Germany		
<b>BARRANCA BLANCA</b> 1855 Iron	Obz	
Barranca blanca, Pass through the Cordil- leras from Atacama Desert, Chili		
<b>BARATTA</b> , 1845 Stone	Cgb	
Baratta Station, thirty-five miles northwest of Deniliquin, New South Wales, Australia		
Bassein	<b>QUENGGOUK</b>	
Bates County	<b>BUTLER</b>	
Batesville	<b>JOE WRIGHT</b>	
<b>BATH</b> , 1892 Stone	Ccb	
Two miles south of Bath, near Aberdeen, Brown County, South Dakota, U S A		
<b>BATH FURNACE</b> , 1902 Stone	Cia	
Five miles south of Salt Lick, Bath County, Kentucky, U S A		
Bathurst	<b>COWRA</b>	
<b>BEACONSFIELD</b> , 1897 Iron	Og	
(Cranbourne), east of Berwick, Mornington County, Victoria, Australia		

- BEAR CREEK**, 1866 Iron Of  
Aeriotopos, Jefferson County, Colorado, U  
S A
- Bear River **BEAR CREEK**
- Beaufort **ORANGE RIVER**
- Beaagency **CHARSONVILLE**
- BEAVER CREEK**, 1893 Stone Cck  
Near boundary of United States on Beaver  
Creek, West Kootenai District, British  
Columbia
- Belgorod **SEVRUKOVO**
- Belgradjik **VIRBA**
- BELLA ROCA**, 1888 Iron Of  
La Bella Roca, Sierra de San Francisco,  
State of Durango, Mexico
- BENARES**, 1798 Stone Cc  
Krakhut, near Benares, Northwestern Prov-  
inces, India
- Benares, 1827 Mhow
- BENDEGO**, 1784 Iron Og  
Bendego, Province of Bahia Brazil
- BERLANGUILLAS**, 1811 Stone Cia  
Berlanguillas, Province of Burgos, Spain
- Bethanien **MUKEROP**
- BETHLEHEM**, 1859 Stone Cck  
Bethlehem, near Albany, Albany County,  
New York, U S A
- BEUSTE**, 1859 Stone Cgb  
Beuste, Département des Basses Pyrénées,  
France
- Bhagur **DHULIA**
- BHERAI**, 1893 Stone Cwa  
Bherai, Kathiawar, Presidency of Bombay,  
India
- Bhurtpur, 1868 **MOTECKA NUGLA**
- BIALYSTOCK**, 1827 Stone Ho  
Bialystock, Government of Bialystock,  
Russia
- BIelokRYNITSCHIE**, 1887 Stone Cib  
Belokrynitschie Government of Volhynia,  
Russia
- Bierbele **BJURBOLE**
- BINGARA**, 1880 Iron Ha  
Bingara, New South Wales, Australia
- BISCHTUBE**, 1888 Iron Og  
Bischtube, Province of Turgai, Western  
Siberia
- BISHOPVILLE**, 1843 Stone Chla  
Near Bishopville, Sumter County, South  
Carolina, U S A
- BISHUNPUR**, 1895 Stone Cs  
Bishunpur, Mirzapur District, Northwestern  
Provinces, India
- BITBURG**, 1802 Siderolite Pa  
Albacher Muhle, near Bitburg, north of  
Treves, Rhenish Prussia
- BJELAJA ZERKOV**, 1796 Stone Cc  
Bjelaja Zerkov, Ukraine, Government of  
Kief, Russia
- BJURBOLE**, 1899 Stone Cca  
Bjurböle, near Borga, south coast of Fin-  
land, Russia
- Blaauw-Kapel **UTRECHT**
- BLACK MOUNTAIN**, 1835 Iron Og  
Black Mountain, Buncombe County, North  
Carolina, U S A
- BLANSKO**, 1833 Stone Cga  
Blansko, Province of Moravia Austria
- BLUE TIER**, 1890 Iron Om  
Northeast Coast of Tasmania, Australia
- BLUFF**, 1878 Stone Ck  
Bluff, three miles southwest of La Grange,  
Fayette County, Texas, U S A
- Bobrik **KHARKOW**
- BOCAS**, 1804 Stone Cw  
Hacienda de Bocas, State of San Luis Potosi,  
Mexico
- BOHUMILITZ**, 1829 Iron Og  
Bohumilitz, District of Prachin, Southwest  
Bohemia
- Bois de Foutaine **CHARSONVILLE**
- Bokkeveldt **COLD BOKKEVELDT**
- Bolson de Mapimi, H 1837 **COAHUILA**
- Bonanza Iron **COAHUILA**
- BOOGALDI**, 1900 Iron Of  
Two miles from Boogaldi Post Office, New  
South Wales, Australia
- Bordeaux **BARBOTAN**
- BORG SAN DONINO**, 1808 Stone Ch  
Borgo San Donino, Cusignano near Parma,  
Italy
- BORI**, 1894 Stone Cia  
Bori, twelve miles northeast of Badnur,  
Betul District, Northwestern Provinces,  
India
- BORKUT**, 1852 Stone Cc  
Borkut, Comitat of Marmarosch, Hungary
- BORODINO**, 1812 Stone Cgb  
Borodino, near Kolotscha, Government of  
Moscow, Russia
- BOTSCHETSCHKI**, 1823 Stone Cg  
Botschetschki Government of Kursh, Russia
- Brabant **UDEN**
- BRAHIN**, 1810 Siderolite Pr  
Rokicky, Government of Minsk, Western  
Russia



**BRAUNAU**, 1847 Iron H  
Braunau, Hauptmannsdorf and Ziegel-  
schlag, District of Koniggratz, North-  
western Bohemia

Brazos, 1836

Breitenbach

**WICHITA**

**STEINBACH**

**BREMERVORDE**, 1855 Stone Ccb  
Bremervorde, near Gnarrenburg, Province  
of Hanover, Prussia

**BRENHAM**, 1890 Siderolite Pk  
Brenham and vicinity Kiowa County, Kan-  
sas, U S A

**BRIDGEWATER**, 1890 Iron Of  
Bridgewater Station, Burke County, North  
Carolina, U S A

Buckeberg **OBERNKIRCHEN**

Burgos **BERLANGUILLAS**

**BURLINGTON**, 1819 Iron Om  
Cooperstown, Otsego County, New York,  
U S A

**BUSCHHOF**, 1863 Stone Cwa  
Buschhof near Jacobstadt, Kurland, Baltic  
Provinces, India

Butcher, Iron **COAHUILA**

**BUTLER**, 1874 Iron Off  
Butler, Bates County, Missouri, U S A

**BUTSURA**, 1861 Stone C1  
Butsura, forty-two miles northeast of Gor-  
uckpur, Northwestern Provinces, India

## C

Cabarras County **MONROE**

**CABEZZO DE MAYO**, 1849 Stone Cw  
Cabezzo de Mayo, Province of Murcia, Spain

**CABIN CREEK**, 1886 Iron Om  
Six miles east of Lamar, Johnson County,  
Arkansas, U S A

**CACARIA**, 1867 Iron Oh  
Cacaria, north of City of Durango, State of  
Durango Mexico

**CACHIYUYAL**, 1875 Iron Om  
Desert of Atacama, Chili

Caille **LA CAILLE**

**CALDERILLA**, 1883 Siderolite Pk  
Suburb of Caldera, Chili

**CAMBRIA**, 1818 Iron Of  
Seven miles northwest of Lockport, Morgan  
County, New York, U S A

**CAMPO DEL CIELO**, 1783 Iron Ds  
Otumpa, Territory of Gran Chaco, Argentine  
Republic

Campo del Pucara **IMILAC**

Canara **UDIPI**

**CANELLAS**, 1861 Stone C1  
Canellas, near Barcelona, Province of Bar-  
celona, Spain

Caney Fork **CARTHAGE**

**CANGAS DE ONIS**, 1866 Stone Cgb  
Cangas de Onis (Engueras) Province of  
Oviedo, Spain

**CAÑON DIABLO**, 1891 Iron Og  
Cañon Diablo, Coconino County Central  
Arizona, U S A

**CANTON**, 1894 Iron Ogg  
Cherokee Mills, Cherokee County, Georgia,  
U S A

**CANYON CITY**, 1875 Iron Og  
Canyon City, Trinity County, Northern  
California, U S A

Caparrosa **TOLUCA**

**CAPE GIRARDEAU**, 1846 Stone Cc  
Seven miles south of Cape Girardeau, Cape  
Girardeau County, Missouri, U S A

Cape Iron, Kap Eisen **CAPE OF GOOD HOPE**

**CAPE OF GOOD HOPE**, 1793 Iron Dc  
(Cape Iron) Cape Colony, South Africa

**CAPE YORK**, 1818 Iron Om  
Fifty miles east of Cape York, Melville Bay,  
Northwest Coast of Greenland

**CAPERR**, 1869 Iron Om  
Caperr, Rio Senguer, Chubut Province,  
Northeast Patagonia

Capitan Range **EL CAPITAN**

Caracoles **IMILAC**

Carcoar **COWRA**

**CARCOTE**, 1889 Stone Ck  
Carcote, Province of Atacama, Chili

Carleton **TUCSON**

**CARLTON**, 1887 Iron Off  
Carlton, Hamilton County, Central Texas,  
U S A

Carrol County **EAGLE STATION**

**CARTHAGE**, 1844 Iron Om  
(Caney Fork), Smith County, Tennessee,  
U S A

Caryfort **CARTHAGE**

Casale, 1868 **MOTTA DI CONTI**

- Casale, 1840 **CERESETO**
- CASAS GRANDES** Prehistoric Om  
Malintzin, State of Chihuahua, Mexico
- CASEY COUNTY**, 1877 Iron Ogg  
Casey County, Central Kentucky, U S A
- CASTALIA**, 1874 Stone Cgb  
Near Castalia, Nash County, North Carolina,  
U S A
- CASTINE**, 1848 Stone Cwa  
Castine, Hancock County, Maine
- Catorze **DESCUBRIDORA**
- Cento **RENAZZO**
- CENTRAL MISSOURI**, 1885 Iron Ogg  
Central portion of State of Missouri, U S A
- CERESETO** 1840 Stone Ccb  
Cereseto, near Ottiglio, Province of Ales-  
sandra, Italy
- CHAIL**, 1814 Stone  
Allahabad, Province of Bengal, India
- Chañaralino **MERCEDITAS**
- CHANDAKAPUR**, 1838 Stone Cib  
Chandakapur Valley of Berar, India
- CHANDPUR**, 1885 Stone Cwa  
Chandpur, five miles northwest of Mainpuri,  
Northwestern Provinces, India
- CHANTONNAY**, 1812 Stone Cgb  
Chantonay, Département de la Vendée,  
France
- CHARCAS**, 1804 Iron Om  
Charcas, State of San Luis Potosi, Mexico
- CHARLOTTE**, 1835 Iron Of  
Charlotte, Dickson County, Central Tennes-  
see, U S A
- Charkow **KHARKOV**
- CHARSONVILLE** 1810 Stone Cga  
Charsonville (Chartres), Meung sur Loire,  
Département du Loire, France
- CHARWALLAS**, 1834 Stone Ci  
Charwallas, twenty miles south-southwest  
of Sirsa, Punjab States, India
- CHASSIGNY** 1815 Stone Cha  
Chassigny, near Langres, Département de  
la Haute Marne, France
- CHATEAU RENARD**, 1841 Stone Cia  
Chateau-Renard, Montargis, Département du  
Loiret, France
- Chatooga County **HOLLANDS STORE**
- Cherokee County, 1867 **LOSTTOWN**
- Cherokee Mills Cherokee County, 1894  
**CANTON**
- CHESTERVILLE**, 1847 Iron  
Chesterville, Chester County South Caro  
U S A
- CHICHIMEGUILAS**, 1901 Iron  
Hacienda of Chichimeguilas, State of Z  
tecas, Mexico
- CHILCAT**, 1881 Iron  
Chilcoot Inlet, Portage Bay, Sout  
Alaska
- Chilpanzingo **TOL**
- CHULAFINNEE** 1873 Iron  
Chulafinnee Cleburne County Alabam  
S A
- CHUPADEROS** 1852 Iron  
Rancho de Chupaderos, State of Chihua  
Mexico
- CINCINNATI**, 1898 Iron  
Found in old collection, Cincinnati, (C  
U S A
- Clairborne **LIME CR**
- Claywater **VERNON COU**
- Cleguerec **KERNO**
- CLEVELAND**, 1860 Iron  
(Lea Iron) Bradley County, Tennessee  
S A
- CLOHARS**, 1822 Stone  
Fouesnant, Quimper, Département de F  
tere, France
- COAHUILA**, 1837 Iron  
Santa Rosa, Sancha Estate, Bonanza, B  
de Mapimi, State of Coahuila, Mexico
- Cobiya **JOEL'S I**
- Cocke County **COSBY'S CR**
- COLD BOKKEVELD**, 1838 Stone  
Cold Bokkeveld, fifteen miles north  
Tulbagh, Cape Colony, Africa
- COLFAX**, 1880 Iron  
Near Ellenborough, Rutherford Cou  
North Carolina, U S A
- COLLESCIPOLI**, 1890 Stone  
Collescipoli, near Terni, Province of Per  
Italy
- Collin County **MACKIN**
- Concepcion, 1784 **ADAR**
- Concepcion **NOG**
- Caney Fork **CARTH**
- Constantine **TADJ**
- CONSTANTINOPLE**, 1805 Stone  
Constantinople, Turkey
- Cooperstown **BURLING**
- COOPERTOWN**, 1860 Iron  
Coopertown, Robertson County Tenna  
U S A

**COPIAPO**, 1863. Brecciated Octahedrite Obe  
Southern part of Desert of Atacama, Chili

**COSBY'S CREEK**, 1890 Iron Og  
Cosby's Creek Cocke County, Eastern Tennessee, U S A

**COSINA**, 1844 Stone Ck  
Loma de la Cosina near Dolores Hidalgo,  
State of Guanajuato, Mexico

Costa Rica

#### HEREDIA

**COSTILLA PEAK**, 1881 Iron Om  
Costilla Peak, Cimarron Range, Taos, New Mexico, U S A

**COWRA**, 1888 Iron Off  
Thirty-five miles southwest of Carcoar,  
Bathurst District, New South Wales,  
Australia

**CRAB ORCHARD**, 1887 Siderolite Mg  
Powder Mill Creek, 8 miles west of Rockwood  
Furnace, Cumberland County, Tennessee,  
U S A

**CRANBERRY PLAINS**, 1852 Iron O  
Poplar Hill, Giles County, Southwestern  
Virginia, U S A

**CRANBOURNE**, 1854 Iron Og  
Cranbourne, Mornington County, Victoria,  
Australia

**CRONSTADT**, 1877 Stone Cga  
Cronstadt, Orange Free State, Africa

**CROSS ROADS**, 1892 Stone Cg  
Cross Roads Township, Wilson County,  
North Carolina U S A

Cross Timbers

#### RED RIVER

**CRUMLIN**, 1902 Stone  
Crumlin, ten miles west of Belfast County  
Antrim, Ireland

**CUBA**, 1872 Iron Om  
Middle portion of Island of Cuba, West  
Indies

**CUERNAVACA**, 1889 Iron Of  
Cuernavaca, State of Morelos, Mexico

Cusignano

#### BORGIO SAN DONINO

**CYNTHIANA** Stone Cg  
Nine miles from Cynthiana, Harrison County,  
Kentucky, U S A

## D

Dacca

#### SHYTAL

**DAKOTA**, 1863 Iron Ogg  
State of South Dakota, U S A

**DALTON**, 1877 Iron Om  
Twelve miles northeast of Dalton, Whitfield  
County, Georgia, U S A

**DANDAPUR**, 1878 Stone Cia  
Dandapur, District of Dorakhpur, North-  
western Provinces, India

**DANIELS KUIL**, 1868 Stone Ck  
Daniels Kuil, Griqualand West, South Africa

**DANVILLE**, 1868 Stone Cga  
Near Danville, Morgan County, Alabama,  
U S A

**DARMSTADT**, 1804 Stone Cga  
Darmstadt Grand Duchy of Hessen, Ger-  
many

**DEAL**, 1829 Stone Ci  
Deal, near Long Branch, Monmouth County,  
New Jersey, U S A

Debreczin

#### KABA

Decatur County **PRAIRIE DOG CREEK**

**DE CEWSVILLE**, 1887 Stone Cw  
De Cewsville Haldimand County, Ontario,  
Canada

**DEEP SPRING**, 1846 Iron Db  
Deep Springs Farm, Rockingham County,  
North Carolina, U S A

**DELLYS**, 1865 Iron Om  
Department of Alger, Algeria, North Africa

Denihiquin

#### BARRATTA

**DENTON COUNTY**, 1856 Iron Om  
Denton County, Texas, U S A

**DESCUBRIDORA**, 1780 Iron Om  
Descubridora Range, east of Catorze, State  
of San Luis Potosi, Mexico

**DHULIA**, 1877 Stone Cwa  
Dhulia, near Bhagur, Bombay Presidency,  
India

**DHURMSALA**, 1860 Stone Ci  
Dhurmsala District of Kangra, Punjab  
Provinces, India

Dickson County

#### CHARLOTTE

**DJATI PENGILON**, 1884 Stone Ck  
Djati Pengilon, District of Ngawi, Island of  
Java

**DOLGOWOLI**, 1864 Stone Cw  
Dolgowoli, Government of Volhynia, Russia

**DOÑA INEZ**, 1888 Siderolite M  
Cerro Doña Inez, Province of Atacama,  
Chili

**DONGA KOHROD**, 1899 Stone Ck  
Donga Khorod, District of Bilaspur Central  
Provinces, India

**DORONINSK**, 1805 Stone Cgb  
Doroninsk Government of Irkutsk, East  
Siberia, Asia

**DRAKE CREEK**, 1827 Stone Cwa  
Drake Creek, Sumner County, Tennessee,  
U S A

**DUEL HILL**, 1873 Iron Og  
Duel Hill, Madison County North Carolina,  
U S A

Dunaburg **LIXNA**

**DUNDRUM**, 1865 Stone Ck  
Dundrum, Tipperary County, Ireland

Dun-le-Poelher **LA BECASSE**

**DURALA**, 1815 Stone Cha  
Durala, eighteen miles south of Umballa,  
Punjab States, India

Durango **RANCHO DE LA PILA**

**DURUMA**, 1853 Stone Cha  
Duruma, Wanika Land, East Africa

**DYALPUR**, 1872 Stone U  
Dyalpur, Sultanpur, Oudh States, India

## E

**EAGLE STATION**, 1880 Siderolite Pr  
Near Eagle Station, Carroll County, Ken-  
tucky, U S A

Eau Claire **HAMMOND**

Echo **SALT LAKE CITY**

Eichstadt **WITMESS**

**ELBOGEN**, 1785 Iron Om  
Elbogen, near Karlsbad, Northwestern Bo-  
hemia

**EL CAPITAN**, 1893 Iron Om  
North Slope of El Capitan Range, Lincoln  
County New Mexico, U S A

El Chanaralmo **MERCEDITAS**

Eldorado County **SHINGLE SPRINGS**

Elgueras **CANGAS DE ONIS**

**ELI ELWAH** Stone  
Eli Elwah, Station, fifteen miles west from  
Hay, New South Wales, Australia

Ehsabetgrad, 1889 **MIGHEI**

Elussawetpol, 1891 **INDARCH**

**EL TULE**, 1889 Iron Om  
Rancho del Tule, Balleza, one hundred  
miles west of Chupaderos, State of Chi-  
huahua, Mexico

Emmet County **ESTHERVILLE**

**EMMITSBURG**, 1854 Iron Om  
Emmitsburg, Frederick County, Maryland,  
U S A

**ENSISHEIM**, 1492 Stone Ckb  
Ensisheim, Province of Alsace, Germany

Entre Rios **NOGOYA**

**EPINAL**, 1822 Stone Cc  
Epinal, Commune of La Baffe, Département  
des Vosges, France

**ERGHEO**, 1889 Stone Ckb  
Amana, near Ergheo, west of Barava, Somali  
Land East Africa

**ERXLEBEN**, 1812 Stone Ck  
Erleben, Province of Saxony, Prussia

**ESNANDES**, 1837 Stone Cg  
Esnandes, Département de la Charente-  
Inférieure, France

**ESTHERVILLE**, 1879 Siderolite M  
Estherville, Emmet County, Iowa U S A

## F

**FARMINGTON**, 1890 Stone Csa  
Farmington, Washington County, Kansas,  
U S A

**FAVARS**, 1844 Stone Ci  
Favars, Département de l'Aveyron, France

Fayette County **BLUFF**

Fehrbellin **LINUM**

**FEID CHAIR**, 1875 Stone Ccb  
Feid Chair, District of La Calle Province  
of Constantine, Algeria, North Africa

**FELIX**, 1900 Stone Kc  
Near Felix, Perry County, Alabama, U  
S A

**FISHER**, 1894 Stone C19  
Fisher, Polk County, Minnesota, U S A

Fish River **GREAT FISH RIVER**

Floyd County **INDIAN VALLEY**

Fomatlan **TOMATLAN**

**FOREST** 1890 Stone Ccb  
Near Forest City, Winnebago County, Iowa,  
U S A

**FORSYTH**, 1829 Stone Cwa  
Near Forsyth, Monroe County, Georgia, U  
S A

**FORSYTH COUNTY**, 1895 Iron Dn  
Forsyth County, North Carolina U S A

**FORT DUNCAN**, 1882 Iron H  
Fort Duncan, Maverick County, Southern  
Texas, U S A

**FORT PIERRE**, 1856 Iron Om  
Twenty miles west of Fort Pierre, Stanley  
County, South Dakota, U S A

**FRANCEVILLE**, 1890 Iron Om  
Franceville, El Paso County, Colorado, U  
S A

**FRANKFORT**, 1866 Iron Om  
Eight miles southwest of Frankfort, Franklin  
County, Kentucky, U S A

**FRANKFORT**, 1868 Stone Ho  
Four miles South of Frankfort, Franklin  
County, Alabama U S A

Franklin County, **FRANKFORT, ALABAMA**

Fredrickshavn **LUOTOLAKS**

Freehold **DEAL**

**FUKUTOMI** 1882 Stone Cga  
Fukutomi, Kineshima District Province of  
Hizen, West Coast of Japan

Furstenberg **KLEIN-MENOW**

**FUTTEHPUR**, 1822 Stone Cwa  
Futtehpur, Northwestern Provinces, India

## G

**GALAPIAN**, 1826 Stone Cwa  
Galapian, near Agen, Département de Lot-  
et-Garonne France

Gargantillo **TOMATLAN**

Garret County **LONACONING**

Gawler Range **YARDEA STATION**

Gera **POHLITZ**

**GERONA** 1900 Stone Cgb  
Gerona, Province of Gerona Spain

Gettysburg **MOUNT JOY**

**GHAMBAT**, 1897 Stone Cia  
Ghambat, Khaipur, Province of Sind, India

**GILGOIN**, 1889 Stone Ck  
Gilgoin Station, forty miles east southeast  
of Brewarrina, New South Wales Aus-  
tralia

Gindorcha **INDARCH**

**GIRGENTI**, 1853 Stone Cwa  
Girgenti Island of Sicily, Italy

Glasgow **HIGH POSSIL**

**GLORIETA**, 1884 Iron Om  
Near Canonicito, Santa Fe County, New  
Mexico, U S A

**GUADENFREI**, 1879 Stone Cc  
Guadenfrei, Province of Silesia, Prussia

Gnarrenburg **BREMERVORDE**

**GOALPARA**, 1868 Stone U  
Goalpara, Province of Assam, India

**GOPALPUR**, 1865 Stone Cc  
Gopalpur, near Bagirhat, Jessore, Province  
of Bengal, India

Gran Chaco **CAMPO DEL CIELO**

**GRAND RAPIDS**, 1883 Iron Of  
Grand Rapids, Walker Township, Michigan,  
U S A

Grasse **LA CAILLE**

**GRAZAC**, 1885 Stone K  
Grazac, Département de Tarn, France

**GREAT FISH RIVER**, 1836 Iron Of  
Graaf Reinet, Cape Colony, South Africa

**GREENBRIER**, 1880 Iron Og  
Three miles north of White Sulphur Springs,  
Greenbrier County, West Virginia, U  
S A

**GROSLEE**, 1827 Iron Of  
Groslee, near Belley, Département de l'Am,  
France

**GROSS DIVINA**, 1837 Stone Cc  
Gross Divina, Trementsner Comitatz, Hungary

**GROSSLIEBENTHAL**, 1881 Stone Cwa  
Grossliebenthal, twelve miles south-southwest  
of Odessa, Government of Cherson, South-  
ern Russia

**GROSSNAJA**, 1861 Stone Cs  
Grossnaja Banks of the River Terek,  
Caucasus Mountains, Russia

**GRUNEBERG**, 1841 Stone Cga  
Gruneberg, Province of Silesia, Prussia

**GUARENA**, 1892 Stone Ck  
Guarena, Province of Badajoz Spain

**GUCA**, 1891 Stone Cc  
Guca, near Cacah, Servia

Guernsey County **NEW CONCORD**

**GUTERSLOH**, 1851 Stone Ccb  
Gutersloh, near Minden, Province of Westphalia, Prussia

**GUILFORD**, 1822 Iron Om  
Guilford County, North Carolina, U S A

**GURRAM KONDA**, 1814 Stone  
Gurram Konda, near Kadapa, Province of Madras, India

Gyulatelke

**MOCS**

## H

Hacienda de Bocas **BOCAS**

**HAINHOLZ**, 1856 Siderolite M  
Near Minden, Province of Westphalia, Prussia

**HAKATA**, 1897 Stone Cga  
Hakata, District of Higashi, Province of Chikuzen, Japan

Hamblen County **MORRISTOWN**

Hamilton County **CARLTON**

**HAMMOND**, 1884 Iron Oh  
Hammond Township, St Croix County, Wisconsin, U S A

**HANIET EL BEGUEL**, 1888 Iron Om  
Seventy miles northeast of Ouaragla, Province of Alger, Algeria, North Africa

**HARRISON COUNTY**, 1859 Stone Cho  
Harrison County, Southern Indiana, U S A

**HASSI JEKNA**, 1890 Iron Of  
Near Well of Hassi Jekna, southwest of Province of Alger, Algeria, North Africa

**HAYDEN CREEK**, 1895 Iron Om  
Hayden Creek, Lemhi County Idaho, U S A

**HENDERSONVILLE**, 1901 Stone  
Hendersonville, Henderson County, North Carolina U S A

Henry County, 1857 **LOCUST GROVE**

Henry County, 1889 **HOPPER**

**HEREDIA**, 1857 Stone Ccb  
Heredia, fifteen miles from San Jose, Costa Rica, Central America

**HESSLE**, 1869 Stone Cc  
Hessle, near Upsala, Sweden

**HEX RIVER**, 1882 Iron H  
Hex River Mountains, Worcester County, Cape Colony South Africa

**HIGH POSSIL**, 1804 Stone Cw  
High Possil, near Glasgow, Scotland

**HOLLAND'S STORE**, 1887 Iron Ha  
Holland's Store, Chattooga County, Georgia, U S A

**HOMESTEAD**, 1875 Stone Cgb  
Homestead and vicinity, Iowa County, Iowa, U S A

Honduras **ROSARIO**

**HONOLULU**, 1825 Stone Cwa  
Honolulu, Island of Oahu, Hawaiian Islands, U S A

**HOPEWELL**, Prehistoric Iron Om  
Hopewell Mounds, Ross County, Ohio

**HOPPER**, 1889 Iron O  
Hopper, Henry County, Virginia, U S A

Howard County **KOKOMO**

**HRASCHINA**, 1751 Iron Om  
Hraschina, near Agram, Province of Croatia, Austria

**HUNGEN**, 1877 Stone Cga  
Hungen, Grand Duchy of Hessen, Germany

**HVITTIS**, 1901 Stone Cck  
Hvittis, Province of Finland, Russia

## I

**IBBENBUHREN**, 1870 Stone Chl  
Ibbenbühren, Province of Westphalen, Prussia

Iglau **STANNERN**

**IHARAOTA**, 1887 Stone Choa  
Iharaota, District of Lalitpur Northwestern Provinces, India

**ILIMAE**, 1870 Iron Om  
Ilimae, Desert of Atacama Chili

**ILLINOIS GULCH**, 1897 Iron Dn  
Near Ophir, Deer Lodge County, Montana, U S A

**IMILAC**, 1822 Siderolite Pi  
Wells of Imilac, Province of Atacama, Chili

Inca **LLANO DEL INCA**

**INDARCH**, 1891 Stone Kca  
Indarch, near Gindorch, District of Schuscha, Transcaucasia, Russia

Independence County **JOE WRIGHT**  
 Independence **KENTON COUNTY**  
**INDIAN VALEY**, 1887 Iron Ha  
 Indian Valley Township, Floyd County,  
 Virginia, U S A  
**INDIO RICO**, 1900 Stone Ck  
 Indio Rico, Province of Buenos Aires,  
 Argentina, South America  
 Invercargill **MAKARIWA**  
**IQUIQUE**, 1871 Iron De  
 Ten leagues east of Iquique, Province of  
 Tarapaca, Chili  
 Irapuata **LA CHARCA**  
**IREDELL**, 1898 Iron H  
 Six miles southwest of Iredell, Bosque  
 County, Central Texas

Iron Creek **VICTORIA**  
 Irtysch **PAVLODAR**  
 Irvin-Amsa Iron **TUCSON**  
 Isle de France **MAURITIUS**  
**ITAPICURU-MIRIM**, 1879 Stone Cc  
 Itapicuru-mirim Province of Maranhao,  
 Brazil  
**IVANPAH**, 1880 Iron Om  
 Ivanpah, San Bernardino County, California,  
 U S A  
 Iwate, 1880 **TOKE-UCHI-MURA**  
 Ixtlahuaca **TOLUCA**

## J

Jacula **PACULA**  
**JACKSON COUNTY**, 1846 Iron Om  
 Jackson County, Northwest Tennessee, U  
 S A  
 Jalisco **TOMATLAN**  
 Jamaica **LUCKY HILL**  
**JAMESTOWN**, 1885 Iron Of  
 Twenty miles southeast of Jamestown,  
 Stutsman County, North Dakota  
**JAMKHEIR**, 1866 Stone  
 Ahmednuggur, Bombay Presidency, India  
 Jamyschewa **PAVLODAR**  
 Janacera-Pass **VACA MUERTA**  
 Jasly **BIALYSTOCK**  
**JELICA**, 1899 Stone Am  
 Near Jezevica, District of Cacak, Jelica  
 Mountains, Servia  
**JENNY'S CREEK**, 1883 Iron Og  
 Old Fork of Jenny's Creek, Wayne County,  
 West Virginia, U S A  
**JEROME**, 1894 Stone Cck  
 Fifteen miles east of Jerome, Smoky Hill  
 River, Gove County, Kansas, U S A  
**JEWEL HILL**, 1854 Iron Of  
 Jewel Hill, Madison County, North Carolina,  
 U S A

**JHUNG**, 1873 Stone Cc  
 Jhung, Punjaub States, India  
 Jigalowka **KHARKOW**  
 Jimenez **CHUPADEROS**  
 Jodzie **YODZE**  
**JOEL'S IRON**, 1858 Iron Om  
 Desert of Atacama, Chili  
**JOE WRIGHT**, 1884 Iron Om  
 Seven miles east of Batesville, Independence  
 County, Arkansas, U S A  
 Johannegeorgenstadt **STEINBACH**  
**JONESBORO**, 1891 Iron Of  
 Jonesboro, Washington County, Tennessee,  
 U S A  
**JONZAC**, 1819 Stone Eu  
 Jonzac, Département de la Charente In-  
 férieure, France  
**JUDESEGERI**, 1876 Stone Cc  
 Judesegeri, District of Tumkur, State of  
 Mysore, India  
**JUNCAL**, 1866 Iron Om  
 Juncal, Desert of Atacama, Chili  
**JUVINAS**, 1821 Stone Eu  
 Juvinas, near Libonnez, Département de  
 l'Ardeche, France

## K

**KAABA**, 1683 Stone (Uncertain)  
 In Sanctuary of the Kaaba, Mecca, Arabia  
 Kaande **OESEL**

**KABA**, 1857 Stone K  
 Kaba, southwest of Debreczin, North Biberer  
 Comit, Hungary

Kadonah	<b>AGRA</b>	
<b>KAEE</b> , 1838 Stone	Cc	
Kae, District of Hardoi, Province of Oudh, India		
<b>KAHANGARAI</b> , 1890 Stone		
Kahangarai, near Tirupatur, District of Salem, Madras Presidency, India		
<b>KAKOWA</b> , 1858 Stone	Cga	
Kakowa, northwest of Orawitza, Kraschower Comitatz, Hungary		
<b>KALUMBI</b> , 1879 Stone	Cwa	
Kalumbi, District of Saltara, India		
Kansada	<b>NESS COUNTY</b>	
<b>KARAKOL</b> , 1840 Stone	Cw	
Karakol, District of Ajagus Kirghiz Steppe, Central Asia		
Karand	<b>VERAMIN</b>	
<b>KENDALL COUNTY</b> , 1887 Iron	Hb	
Kendall County, Central Texas, U S A		
<b>KENTON COUNTY</b> , 1889 Iron	Om	
Eight miles south of Independence, Kenton County, Kentucky, U S A		
<b>KERILIS</b> , 1874 Stone	Cga	
Kerils, Département des Cotes-du-Nord, France		
<b>KERNOUVÉ</b> , 1869 Stone	Cka	
Kernouvé, near Cléguérec, Département de Morbihan, France		
<b>KESEN</b> , 1850 Stone	Ceb	
Grove of Buddhist Temple of Choyenji, Village of Kesen, Province of Hondo, Japan		
<b>KHAIRPUR</b> , 1873 Stone	Ck	
Khairpur, near Sutlej River, State of Bhawalpur, India		
<b>KHARKOW</b> , 1787 Stone	Cwa	
Jigalowka, near Kharkow, seven miles from Bobrik, Government of Charkow, Russia		
<b>KHERAGUR</b> , 1860 Stone	Cc	
Kheragur, twenty-eight miles from Bhurtpoor, Northwestern Provinces, India		
<b>KHETREE</b> , 1867 Stone	Cgb	
Saonlod, near Khetree, Rajputanah, Northwestern Provinces, India		

<b>KIKINO</b> , 1809 Stone	Cwa	
Kikino, District of Wjasemsk, Government of Smolensk, Russia		
<b>KILLETER</b> , 1844 Stone	Cwa	
Killeter, County Tyrone, Ireland		
Klausenburg	<b>MOOS</b>	
<b>KISSIJ</b> , 1899 Stone	Cs	
Near Tschuwaschskye Kissij, District of Tschistopol, Government of Kazan, Russia		
<b>KLEIN MENOW</b> , 1862 Stone	Cck	
Klein Menow, Grand Duchy of Mecklenburg-Strelitz, Germany		
<b>KLEIN WENDEN</b> , 1843 Stone	Ck	
Klein Wenden, near Nordhausen, Province of Saxony, Prussia		
<b>KNYAHINYA</b> , 1866 Stone	Cg	
Knyahinya, near Nagy-Berezna, Ungvarer Comitatz, Hungary		
<b>KODAIKANAL</b> , 1898 Iron	Obk	
Palni Hills, Madura District, Madras Presidency, India		
<b>KOKOMO</b> , 1862 Iron	De	
Seven miles southwest of Kokomo, Howard County, Indiana, U S A		
<b>KOKSTAD</b> , 1887 Iron	Om	
Kokstad, East Griqualand, Cape Colony, South Africa		
Konia	<b>ADALIA</b>	
<b>KRAHENBERG</b> , 1869 Stone	Cho	
Krahenberg, near Zweibrücken, Rhenish Bavaria		
Krakhut	<b>BENARES</b>	
Krasnojarsk	<b>MEDWEDEWA</b>	
<b>KRASNOJ-UGOL</b> , 1829 Stone	Cc	
Krasnoj-Ugol, District of Saposhok, Government of Rasan, Russia		
Krawin	<b>TABOR</b>	
<b>KULESCHOWKA</b> , 1811 Stone	Cwa	
Kuleschowka, District of Romener, Government of Poltawa, Russia		
<b>KUSIALI</b> , 1860 Stone	Cw	
Kusiali, District of Gurlwhal, Northwestern Provinces, India		

## L

La Baffe	<b>EPINAL</b>	
<b>LA BECASSE</b> , 1879 Stone	Cw	
La Becasse, Commune de Dun le Poelier, Département de l'Indre, France		
La Bella Roca	<b>BELLA ROCA</b>	
<b>LABOREL</b> , 1871 Stone	Cib	
Laborel, Département de la Drôme, France		

<b>LA CAILLE</b> , 1828 Iron	Om	
South of St Auban Département des Alpes Maritimes, France		
<b>LA CHARCA</b> , 1878 Stone	C	
La Charca, near Irapuato, State of Guanajuato, Mexico		
<b>LA GRANGE</b> , 1860 Iron	Of	
LaGrange, Oldham County, Kentucky, U S A		



La Grange, 1878 **BLUFF**

**L'AIGLE**, 1803 Stone Cib  
L'Aigle and Vicinity, Département de l'Orne,  
France

Lalitpur **IHARAOTA**

**LANCE**, 1872 Stone Kc  
Lancé, Département de Loir-et Cher, France

**LANCON**, 1897 Stone Cia  
Lancon, near Aix en Provence, Département  
des Bouches-du-Rhone, France

**LA PRIMITIVA**, 1888 Iron Dp  
Salitre, Tarapaca Desert, forty miles west  
of Iquique, Chili

Lasdany **LIXNA**

**LAUNTON**, 1830 Stone  
Launton, near Bicester, Oxfordshire, Eng-  
land

La Vivionnière **LE TEILLEUL**

Lea Iron **CLEVELAND**

Leland **WINNEBAGO COUNTY**

**LENARTO**, 1814 Iron Om  
Near Bartfeld, Saroser District, Province of  
Galicia, Austria

**LENORKA**, 1902 Stone  
Lenorka, Government of Poltava, Russia

**LE PRESOIR**, 1845 Stone Cc  
Le Pressoir Commune of Louans, Départe-  
ment d' Indre-et-Loir, France

Lerici **PULTUSK**

**LES ORMES**, 1857 Stone Cw  
Les Ormes, near Joigny Département de  
l'Yonne, France

**LESVES**, 1896 Stone Cw  
Lesves, Province of Namur, Belgium

**LE TEILLEUL**, 1845 Stone Ho  
La Vivionnière, Commune of Le Teilleul  
Département de la Manche, France

**LEXINGTON COUNTY**, 1880 Iron Og  
Lexington County, South Carolina, U S A

**LICK CREEK**, 1879 Iron H  
Lick Creek, Davidson County, North Caro-  
lina, U S A

**LIME CREEK**, 1834 Iron H  
Near Claiborne, Monroe County, Alabama,  
U S A

**LIMERICK**, 1813 Stone Cgb  
Adare and vicinity, County of Limerick,  
Ireland

Lincoln County **PETERSBURG**

Linn County **MARION**

**LINNVILLE**, 1882 Iron Db  
Linnville Mountain, Claiborne, Burke County  
North Carolina, U S A

**LINUM**, 1854 Stone Cw  
Linum, near Fehrbellin, Province of Brand-  
enburg, Prussia

**LION RIVER**, 1853 Iron Of  
Near Bethany, Great Namaqua Land,  
South Africa

Lippe **BARNTRUP**

**LISSA**, 1808 Stone Cwb  
Lissa, District of Bunzlau, Bohemia

**LITTLE PINEY**, 1839 Stone Cc  
Pine Bluff on Gasconade River, ten miles  
southwest of Little Piney Pulaski County,  
Missouri, U S A

**LIXNA**, 1820 Stone Cga  
Lasdany, near Lixna, Province of Courland,  
Russia

Ljunby **LUNDSGARD**

**LLANO DEL INCA** Siderolite M  
Llano del Inca Desert of Atacama, Chili

Lockport **CAMBRIA**

**LOCUST GROVE**, 1857 Iron Ds  
Locust Grove, Henry County, Georgia, U  
S A

**LODHRAN**, 1868 Siderolite Lo  
Twelve miles east of Lodhran, Mooltan,  
Punjaub States, India

**LONACONING**, 1888 Iron Og  
Twelve miles south of Lonaconing, Alle-  
gany County, Western Maryland, U  
S A

**LONG ISLAND**, 1891 Stone Cia  
Three miles west of Long Island, Phillips  
County, Kansas, U S A

**LOSTTOWN**, 1868 Iron Om  
Two miles southwest of Losttown, Cherokee  
County, Georgia, U S A

Louans **LE PRESOIR**

Louisa County **STAUNTON**

**LUCÉ**, 1768 Stone Cwa  
Lucé en Maine, Département de la Sarthe,  
France

**LUCKY HILL**, 1885 Iron Om  
Lucky Hill, St Elizabeth, Jamaica, West  
Indies

**LUIS LOPEZ**, 1896 Iron Om  
Five miles southwest of Socorro, Socorro  
County New Mexico, U S A

**LUJAN**, Prehistoric Siderolite M  
Near Villa Lujan Province of Buenos Aires,  
Argentina, South America

**LUMPKIN**, 1869 Stone Cck  
Twelve miles southwest of Lumpkin, Stewart  
County, Georgia, U S A

**LUNDSGARD**, 1889 Stone Cw  
Lundsgard, Parish of Ljungby, Lan of  
Malmöhus, Sweden

**LUOTOLAKS**, 1813 Stone Ho  
Luotolaks, near Frederikshavn, Govern-  
ment of Viborg, Finland, Russia

**LUPONNAS**, 1753 Stone Cib  
Luponnas, sixteen miles from Ponte de  
Vevle, Département de l'Ame, France

**LUTSCHAUNIG**, 1860 Stone Cg  
Lutschaunig, Desert of Atacama Chili

## M

**MACAO**, 1836 Stone Cia  
Macao, north of River Assu, Province of  
Rio Grande, North Brazil

Macerata **MONTE MILONE**

**MAC KINNEY**, 1870 Stone Cs  
Eight miles southwest of MacKinney,  
Collin County, Texas, U S A

**MACQUAIRE RIVER**, 1857 Siderolite M  
Macquaire River, New South Wales, Au-  
stralia

**MADOC**, 1854 Iron Of  
Madoc Township, Hastings County, Ontario  
Canada

**MADRID**, 1896 Stone Cwa  
Madrid, Province of Madrid, Spain

**MAEME**, 1886 Stone Cia  
Maeme, Hislugari, Province of Satsuma,  
Japan

**MAGURA**, 1840 Iron Og  
Magura, Comitát Arva, Hungary

**MAINZ**, 1852 Stone Cia  
Near Mainz, Grand Duchy of Hesse, Ger-  
many

**MAKARIWA**, 1879 Stone Cgb  
Makariwa, near Invercargill, New Zealand

**MANBHOOM**, 1863 Stone Am  
Manbhoom, Bengal Presidency, India

**MANEGAUM**, 1843 Stone Chl  
Manegaum, District of Khandeish, India

Mani **TOLUCA**

**MANTOS BLANCOS**, 1876 Iron Of  
Mount Hicks, Desert of Atacama

**MARION**, 1847 Stone Cwa  
Nine miles from Marion, Linn County,  
Iowa, U S A

**MARJALAHTI**, 1902 Siderolite Pi  
Marjalahti Bay, Ladoga Lake, Finland  
Russia

Marmaros **BORKUT**

**MARSHALL COUNTY**, 1860 Iron Om  
Marshall County, Kentucky, U S A

**MART**, 1898 Iron Off  
Mart, McLennan County, Central Texas,  
U S A

**MASCOMBES**, 1835 Stone Cw  
Mascombés, Département de la Corrèze,  
France

**MASSING**, 1803 Stone Ho  
Massing, Landgericht Eggenfeld, Bavaria

**MATATIELA**, 1885 Iron Om  
Fifteen leagues west northwest from Kokstad,  
East Griqualand, South Africa

**MAUERKIRCHEN**, 1768 Stone Cw  
Near Mauerkirchen, Upper Austria

**MAURITIUS**, 1802 Stone Cho  
Isle aux Tonneliers, northwestern Coast of  
Island of Mauritius, Indian Ocean

Maverick County **FORT DUNCAN**

**MAZAPIL**, 1885 Iron Om  
Rancheria de Concepcion, eight miles east  
of Mazapil, State of Zacatecas Mexico

Mecca **KAABA**

**MEDWEDEWA**, 1749 Siderolite Pk  
Medwedewa (Krasnojarsk), Government of  
Jeniseisk, Central Siberia

**MEERUT**, 1860 Stone  
Meerut, Northwestern Provinces, India

**MEJILLONES**, 1874 Siderolite Mg  
Near Mejillones, Province of Atacama,  
Chili

**MERCEDITAS**, 1884 Iron Om  
Ten leagues east of Chanaral, Northern  
Chili

**MERN**, 1878 Stone C  
Mern, four miles south of Praesto, Denmark

**MEUSELBACH**, 1897 Stone Ceka  
Meuselbach, Amt Gehren, Principality of  
Schwartzburg Rudolstadt, German Em-  
pire

**MEXICO**, 1859 Stone Cgb  
Mexico, Province of Pampanga, Island of  
Luzon, Philippine Archipelago

**MEZO-MADARAS**, 1852 Stone Cgb  
Near Mezo-Madaras, Province of Transyl-  
vania, Austria

Mezquital **SAN FRANCISCO DE  
MEZQUITAL**

**MHOW**, 1827 Stone C1  
Mhow, District of Azamgarh, Northwestern  
Provinces, India

**MIDDLESBOROUGH**, 1881 Stone Cw  
Pennymann's Siding, near Middlesborough,  
County of York, England

Midt Vaae **TYSNES**

**MIGHEI**, 1889 Stone K  
Mighei, District of Elisabethgrad, Govern-  
ment of Kherson, South Russia

Mikenskoj **GROSSNAJA**

**MILENA**, 1842 Stone Cw  
Pusinsko Selo, Warasdmer, Comitat, Croatia,  
Austria

**MINAS GERAES**, 1888 Stone Cwa  
Province of Minas Geraes, Brazil

**MINCY**, 1860 Siderolite M  
Mincy, Taney County, Missouri, U S A

**MISSHOF**, 1890 Stone Ce  
Manor of Misshof, eight miles west-south-  
west of Baldohn, Province of Kurland,  
Baltic Provinces, Russia

**MISTECA**, 1804 Iron Om  
(Yanhuilan) State of Oaxaca, Mexico

**MOCS**, 1882 Stone Cwa  
Mocs and vicinity, Province of Transyl-  
vania, Austria

**MOCTEZUMA**, 1899 Iron Om  
Moctezuma, State of Sonora, Mexico

**MOLINA**, 1858 Stone Cgb  
Molina, Province of Murcia, Spain

**MONROE**, 1849 Stone Cga  
Cabarras County, eighteen miles south of  
Monroe, Union County, North Carolina,  
U S A

Montargis **CHATEAU RENARD**

Montauban **ORGUEIL**

**MONTE MILONE**, 1846 Stone Cwb  
Ten miles from Macerata, Province of Rome,  
Italy

**MONTLIVAUT**, 1838 Stone Cw  
Département de Loir-et-cher, France

Montrejean **AUSSON**

**MOONBI**, 1892 Iron Of  
Near Tamworth, New South Wales, Australia

**MOORADABAD**, 1808 Stone Cw  
Mooradabad, Northwest Provinces, India

**MOORANOPPIN**, 1893 Iron Ogg  
Fifty miles west of Coolgardie, Lansdown  
County, West Australia

**MOORESFOOT**, 1810 Stone Ccb  
Moorefoot, County of Tipperary, Ireland  
Maranhao **ITAPICURU-MIRIM**

**MORDVINOVKA**, 1826 Stone Cw  
Mordvinovka, thirty miles southeast of  
Pavlograd, Government of Ekaterinos-  
law, Southern Russia

Morelos **AMATES**

**MORITO**, 1600 Iron Om  
El Morito, near Hacienda of San Gregorio,  
Valle de Allende, State of Chihuahua,  
Mexico

**MORNANS**, 1875 Stone Cga  
Mornans, Département de la Drome, France

**MORRADAL**, 1892 Iron Db  
Morradal, near Grjøthen, Skiaker District,  
Norway

**MORRISTOWN**, 1887 Siderolite Mg  
Hamblen County, Tennessee, U S A

**MOTEEKA NUGLA**, 1868 Stone Ck  
Biana District, State of Bhurtpur, Rajputana  
States, India

**MOTTA DI CONTI**, 1868 Stone Ce  
Motta di Conti, District of Sasale, Piedmont,  
Italy

**MOUNT BROWNE**, 1902 Stone Cc  
Mount Browne, Evelyn County, New South  
Wales, Australia

**MOUNT DYRRING**, 1903 Siderolite Pk  
Mount Dyrring, eight miles north of Bridg-  
man, Singleton District, New South  
Wales, Australia

Mount Hicks **MANTOS BLANCOS**

**MOUNT JOY**, 1887 Iron Ogg  
Five miles southeast of Gettysburg, Adams  
County, Pennsylvania, U S A

Mount Ouray **UTE PASS**

**MOUNT STIRLING**, 1892 Iron Og  
Mount Stirling, sixty miles east of York,  
West Australia

**MOUNT VERNON**, 1868 Siderolite Pk  
Mount Vernon, Christian County, Kentucky,  
U S A

**MOUNT ZOMBA**, 1899 Stone Cwa  
Zomba, Nyassa Land, British South Africa

Muchachos **TUCSON**

**MUDDOOR**, 1865 Stone Cc  
Near Annay Doddi, State of Mysore, Madras  
Presidency, India

**MUHLAU**, 1877 Stone Cc  
Near Innsbruck, Tyrol, Austria

**MUKEROP**, 1899 Iron Off  
Near Bethany, District of Gibeon, Great  
Namaqua Land, Southwest Africa

**MUNGINDI**, 1897 Iron Off  
Mungindi, Southern Queensland, Australia

Murcia, 1858 **MOLINA**

Murcia, 1870 **CABEZZO DE MAYO**

**MURFREESBORO**, 1847 Iron Om  
Murfreesboro, Rutherford County, Central  
Tennessee, U S A

**MURPHY**, 1839 Iron H  
Murphy, Cherokee County, North Carolina,  
U S A

Muskogum County **NEW CONCORD**

## N

**NAGERIA**, 1875 Stone  
District of Agra, Northwestern Provinces,  
India

**NAGY-BOROVE**, 1895 Stone Cg  
Nagy-Borove, Liptauer Comitatus, Hungary

Nagy-Divina **GROSS-DIVINA**

**NAGY-VAZSONY**, 1890 Iron Om  
Near Voros-Bereny, Veszprimer Comitatus,  
Western Hungary

**NAMMIANTHAL**, 1886 Stone Cca  
Nammianthal, District of South Arcot,  
Madras Presidency, India

Namur **LESVES**

**NANJEMOY**, 1825 Stone Cc  
Nanjemoy, Charles County, U S A

**NARRABURRA CREEK**, 1854 Iron Ogg  
Twelve miles east of Temora, New South  
Wales, Australia

Nash County **CASTALIA**

**NAWAPALI**, 1890 Stone K  
Nawapali, Sambhalpur District, Central  
Provinces, India

Nebraska **FORT PIERRE**

**NEDAGOLLA**, 1870 Iron Dn  
Nedagolla, near Parvatipur, Vizagapatam  
District, Madras Presidency, India

**NEJED**, 1863 Iron Om  
Wadee Banee Khaled, District of Nejed  
Central Arabia

**NELLORE**, 1852 Stone Cc  
Yatoor, near Nellore Madras, India

**NELSON COUNTY**, 1860 Iron Ogg  
Nelson County, Kentucky, U S A

**NENNTMANNSDORF**, 1872 Iron H  
Nenntmannsdorf, eleven miles southeast of  
Pirna, Saxony

**NERFT**, 1864 Stone Cia  
Province of Kurland, Baltic Provinces,  
Russia

**NESS COUNTY**, 1893 Stone Cb  
Kansada, Franklinville, Wellmansville, and  
other localities in Ness County Kansas,  
U S A

Netschaevo **TULA**

Newberry **RUFF'S MOUNTAIN**

**NEW CONCORD**, 1860 Stone Cia  
New Concord and vicinity, Guernsey County,  
Ohio, U S A

New Granada **RASGATA**

Newton County **MINCY**

**NGAWI**, 1883 Stone Cen  
Gentoeng and vicinity, Département of  
Ngawi, Presidency of Madiaoen, Java

**N'GOUREMA**, 1900 Iron Obzg  
M'Gourema, 20 miles north of Koakowin,  
Port of Jenneh on Island of Massina, Prov-  
ince of Massina, Upper Niger, Soudan,  
Africa

**NIAGARA**, 1879 Iron Ogg  
Niagara, Grand Forks County, North Dakota,  
U S A

Nickolaew **BISCHTUBE**

**NOBLEBOROUGH**, 1823 Stone Ho  
Near Nobleborough, Lincoln County Maine,  
U S A

**NOCHTUISK**, 1876 Iron Ogg  
Nochtuisk Government of Yakutsk, East  
Siberia

**NOCOLECHE**, 1895 Iron Om  
Near Wanaaring, forty miles northwest of  
Bourke New South Wales

**NOGOYA**, 1879 Stone K  
Between Nogoya and Concepcion, Province  
of Entre Rios, Argentine Republic

Nord Brabant **UDEN**

**NOVO UREI**, 1886 Stone U  
Novo Urei, Government of Penza, Province  
of Kazan, Russia

**NULLES**, 1851 Stone Cgb  
Nulles and vicinity, northwest of Tarragona,  
Province of Spain

## O

**OAKLEY**, 1895 Stone Ck  
Fifteen miles southeast of Oakley, Logan  
County, U S A

Oaxaca **MISTECA**

**OBERNKIRCHEN**, 1863 Iron Of  
Near Buckeberg, Westphalia, Central Prussia

Ocatitlan **TOLUCA**

Ochansk **TABORY**

**OCZERETNA**, 1871 Stone Cga  
Oczeretna Lipowitz, Government of Kief,  
Southern Russia

Odessa **GROSS LIEBENTHAL**

**OESSEL**, 1855 Stone Cw  
Estate of Kaande, Island of Oesel, Province  
of Livonia, Baltic Province, Russia

**O-FEHERTO**, 1900 Stone C  
O-Feherto, near Nyregyhaza Comitát, Sza-  
bolcs, Hungary

**OGLI**, 1730 Stone Cw  
Temple of Fukachi, Ogi, Province of Hizen,  
Japan

**OHABA**, 1857 Stone Cga  
Ohaba, near Veresegyhaza, Blasendorf Dis-  
trict, Siebenburgen, Hungary

**OKNINY**, 1834 Stone Cgb  
Kremenetz Circle, Government of Volhynia,  
Russia

**OKTIBBEHA** Prehistoric Iron Db  
Oktibbeha County, Mississippi, U S A

**ORANGE RIVER**, 1856 Iron Om  
Garieb, Orange River, Southwest Africa

**ORGUEIL**, 1864 Stone K  
Near Montauban, Département Tarn et  
Garonne, France

**ORNANS**, 1868 Stone Cco  
Near Salins, Doubs, France

**OROVILLE**, 1893 Iron Om  
Oroville, Bath County, Northern California,  
U S A

**ORVINIO**, 1872 Stone Co  
Orvinio and vicinity Province of Perugia,  
Italy

**OSCURO MOUNTAINS**, 1895 Iron Og  
Oscuro Mountains, Socorro County, New  
Mexico, U S A

**OSHIMA**, 1886 Stone  
Oshima Mura Tsa Gori, Province of Satsuma,  
West Coast of Japan

Otsego County **BURLINGTON**

**OTTAWA**, 1896 Stone Cho  
Franklin County, Kansas, U S A

Otumpa **CAMPO DEL CIELO**

Ouaregla **HANIEL EL-BENGUEL**

Oued Mequiden **HASSI JEKNA**

**OVIEDO**, 1856 Stone Cw  
Oviedo Province of Asturia, Spain

Oynchimura **YENSIGAHARA**

## P

**PACULA**, 1881 Stone Cwb  
Three miles east of Pacula, District of  
Jacula, State of Hidalgo, Mexico

Paderborn **HAINHOLZ**

**PALEZIEUX** 1901 Stone Cck  
Northwest of Chervettaz, near Palezieux,  
Canton of Lausanne, Switzerland

Pallas Iron **MEDWEDEWA**

**PAMPANGA**, 1859 Stone Cg  
Province of Pampanga, Philippine Islands

**PAN DE AZUCAR**, 1887 Iron Og  
Attacama, Chili

Papasquiaro **BELLA ROCA**

**PARNALLEE**, 1857 Stone Cga  
Parnallee, sixteen mil's south of Madras  
Presidency, of Madras, India

**PAVLOWKA**, 1882 Stone Ho  
District of Balaschew, Government of Sara-  
towch, Russia

**PAVLODAR**, 1885 Siderolite Pk  
Pavlodar, Jameschewa, Semipalatinsk, Gov-  
ernment of Tomsk, West Siberia

Pegu **QUENGGOUK**

**PERAMIHO**, 1899 Stone Eu  
Mission Station in Songea District, German  
West Africa

**PERSIMMON CREEK**, 1903 Iron Om  
Persimmon Creek, Cherokee County, North  
Carolina, U S A

**PERTH**, 1830 Stone C  
North Inch, Scotland

Perugia **ASSISI**

**PETERSBURG**, 1855 Stone Ho  
Near Petersburg, Lincoln County, Tennessee,  
U S A

**PETROPAVLOVSK**, 1841 Iron Om  
Petrovavlovsk on Mrass River, Government  
of Akmolinsk, West Siberia

Phillips County **LONG ISLAND**

**PHU LONG**, 1887 Stone Cea  
Phu Long, Canton of Binh Chanh, Coch  
China

Pila **RANCHO DE LA PILA**

**PILLISTFER**, 1863 Stone Ck  
Pillistfer, District of Fellin, Province of  
Courland, Western Russia

Pine Bluff **LITTLE PINEY**

**PIPE CREEK**, 1887 Stone Cka  
Near Pipe Creek, thirty-five miles southwest  
of San Antonio, Texas, U S A

**PIQUETBERG**, 1881 Stone Cea  
Cape Colony, South Africa

**PIRGUNJE**, 1882 Stone Cwa  
Dinagepur, Province of Bengal, India

Pirna **NENNTMANNSDORF**

**PIRTHALLA**, 1884 Stone Ccb  
District of Hissar, Punjab India

**PITTSBURG**, 1850 Iron Ogg  
Miller's Run, Allegheny County, Pennsylv  
ania, U S A

**PLOSKOWITZ** 1723 Stone Ccb  
Bunzlau, Bohemia

**PLYMOUTH** 1893 Iron Om  
Plymouth, Marshall County, Eastern In  
diana, U S A

**PNOMPEHN**, 1868 Stone Cw  
Pnompehn, Cambodia, French Indo-China

**POHLITZ**, 1819 Stone Cwa  
Pohlitz, near Gera, Principality of Reuss-  
Gera, Prussia

Portiers **VOUILLÉ**

**POKHRA**, 1866 Stone Ck  
Pokhra, near Bustee Northwest Provinces,  
India

**PONTA GROSSA**, 1846 Stone  
Province of Parana, Brazil (Doubtful iden  
tity)

Poplar Hill **CRANBERRY PLAINS**

Port Orford (doubtful) **ROGUE RIVER**

Powder Mill Creek **CRAB ORCHARD**

**PRAIRIE DOG CREEK**, 1893 Stone Cck  
Prairie Dog Creek, Decatur County, Kansas,  
U S A

**PRAMBANNAN**, 1797 Iron Off  
Prambanan Socracarta Presidency, Central  
Java

Praskoles **ZEBRAK**

**PRICETOWN**, 1893 Stone Cw  
Pricetown, Highland County, Ohio

**PULSORA**, 1863 Stone Cib  
Near Rutlam State of Indore, India

**PULTUSK**, 1868 Stone Cgb  
Pultusk and vicinity, Poland, Russia

**PUQUIOS**, 1885 Iron Om  
Puquios, eight miles east of Copiapo, Chili

Pusinsko Selo **MILENA**

**PUTNAM COUNTY**, 1839 Iron Of  
Putnam County, Georgia U S A

## Q

**QUEENSLAND**, 1894 Iron Og  
Uncertain localitv, South Queensland, Aus  
tralia

**QUENGGOUK**, 1857 Stone Cc  
Quenggouk, Bassein District, Pegu British  
Burmah

**QUESA**, 1898 Iron Of  
Quesa, District of Enguera, Province of  
Valencia, Spain

**QUINCAY**, 1851 Stone Cgb  
Quincay, Département de la Vienne, France

## R

**RAFRUTI** 1886 Iron Dn  
Rafuti, Emmenthal, Canton of Berne  
Switzerland

**RAKOVKA**, 1878 Stone Ci  
Rakovka, Government of Tula, Russia  
Ranchito **BACUBIRITO**

**RANCHO DE LA PILA**, 1804 Iron Om  
Nine leagues East of Durango, State of  
Durango, Mexico

**RANCHO DE LA PRESA**, 1899 Stone  
Rancho de la Presa, District of Zenapecuaro,  
State of Michoacan, Mexico

**RASGATA**, 1810 Iron Ds  
Santa Rosa, Province of Boyaca, Republic  
of Columbia, U S A

**RED RIVER**, 1808 Iron Om  
Cross Timbers, Head Waters of Red River,  
Texas, U S A

**REED CITY**, 1895 Iron Om  
Reed City, Osceola County Michigan, U  
S A

**RENAZZO**, 1824 Stone Cs  
Renazzo, near Cento, Province of Ferrara,  
Italy

**RHINE VALLEY**, 1901 Iron Om  
Rhine Villa South Australia

**RICHMOND**, 1828 Stone Cck  
Seven miles southwest of Richmond, Hen-  
rico County, Virginia, U S A

Rittersgrun **STEINBACH**

**ROCHESTER**, 1876 Stone Cc  
Near Rochester, Fulton County, Indiana,  
U S A

**RODA**, 1871 Stone Ro  
Near Huesca, Province of Huesca, Spain

**RODEO**, 1850 Iron Om  
Rodeo, seventy miles north of Durango,  
State of Durango Mexico

**ROEBOURNE**, 1892 Iron Om  
Roebourne Northwest Australia

Rokicky **BRAHIN**

Roquefort **BARBOTAN**

**ROSARIO**, 1897 Iron Og  
Rosario Northern Honduras

**ROWTON**, 1876 Iron Om  
Seven miles north of the Wrekin, Wellin-  
ton, Shropshire, England

**RUFF'S MOUNTAIN**, 1844 Iron Om  
Ruff's Mountain, Lexington County, South  
Carolina, U S A

**RUSHVILLE**, 1866 Stone Cg  
Five miles south of Brockville, Franklin  
County, Indiana, U S A

**RUSSEL GULCH**, 1863 Iron Of  
Russel Gulch, Gilpin County, Colorado

Rutherford County **COLFAX**

## S

**SABETMAHET**, 1885 Stone C  
Eleven miles northwest of Balrampur,  
Gonda District, Province of Oudh India

**SACRAMENTO MOUNTAINS**, 1896 Iron Om  
Sacramento Mountains, Lincoln County,  
New Mexico U S A

**SAINT CAPRAIS DE QUINSAC** 1883 Ci  
Stone  
Département de la Gironde, France

**SAINT CHRISTOPHE-LA-CHARTREUSE**,  
1841 Stone  
District of Roches Servieres, Vendee,  
France  
Little known of this stone

**SAINT DENNIS WESTREM**, 1855 Stone Cca  
Near Ghent, Flanders, Belgium

**SAINT FRANCOIS COUNTY**, 1863 Iron Og  
Saint Francois County, Southeastern Mis-  
souri, U S A

**SAINT GENEVIEVE**, 1888 Iron Of  
Saint Genevieve County, Southeastern Mis-  
souri, U S A

**SALINE**, 1898 Stone Cck  
Saline Township, Sheridan County, Kansas,  
U S A

Salitra **LA PRIMITIVA**

**SALLES**, 1798 Stone Cia  
Salles, near Lyons, Département du Rhone,  
France

Saltillo **COAHUILA**

**SALT LAKE CITY**, 1869 Stone Cgb  
Between Salt Lake City and Echo Utah,  
U S A

**SALT RIVER**, 1850 Iron Off  
Twenty miles south of Louisville, Bullit  
County, Kentucky, U S A

**SAN ANGELO**, 1897 Iron Om  
San Angelo, Tom Green County, Central  
Texas, U S A

Sanchez Estate **COAHUILA**

**SAN CHRISTOBAL**, 1896 Iron Dl  
San Christobal, Province of Atacama, Chili

**SAN EMIGDIO**, 1887 Stone Cc  
San Emigdio Range, Bernardino County,  
California, U S A

**SAN FRANCISCO DEL MEZQUITAL**, 1868  
Iron Ds  
(Mezquitil) State of Durango, Mexico

San Gregorio **MORITO**

**SAN PEDRO SPRINGS**, 1887 Stone Cw  
San Pedro Springs, near San Antonio, Bexar  
County, Texas, U S A

**SANTA APOLONIA**, 1872 Iron  
State of Tlaxcala, Mexico

Santa Catharina (Terrestrial) **MORO DI RICCIO**  
Santa Rosa **COAHUILA**

Santa Rosa	<b>TOCAVITA</b>	
Santiago del Estero	<b>CAMPO DEL CIELO</b>	
<b>SAO JULIAO DE MOREIRA</b> , 1883	Iron	
	Ogg	
Near Ponte de Lima, Province of Minho, Portugal		
Sarbanovac	<b>SOKO BANJA</b>	
<b>SAREPTA</b> , 1854	Iron	Og
Thirty miles north of Sarepta, Government of Saratov, Eastern Russia		
Saskatschewan	<b>VICTORIA</b>	
Satsuma	<b>YENSHIGAHARA</b>	
<b>SAUGUIS</b> , 1868	Stone	Cwa
Sauguis-Saint-Etienne, Département des Basses Pyrenees, France		
Saurette	<b>APT</b>	
<b>SAWTSCHENSKOJE</b> , 1894	Stone	Cck
Sawtschenskoje, District of Tiraspol, Govern- ment of Cherson, Russia		
Scheikahr-Statann	<b>BUSCHHOF</b>	
<b>SCHELLIN</b> , 1715	Stone	Cia
Schellin, near Stargard, Province of Pomer- ania, Prussia		
<b>SCHOLAKOV</b> , 1814	Stone	Cwa
Scholakov, Government of Ekaterinoslaw, Russia		
<b>SCHONENBERG</b> , 1846	Stone	Cwa
Schonenberg, near Pfaffenhausen, Suabia Schuscha		
	<b>INDARCH</b>	
<b>SCHWETZ</b> , 1850	Iron	Om
Near Culm, Eastern Prussia		
<b>SCOTTSVILLE</b> , 1867	Iron	H
Near Scottsville, Allen County, Kentucky U S A		
<b>SEARSMONT</b> , 1871	Stone	Cc
Searsmont, Waldo County, Maine, U S A		
<b>SEELASGEN</b> , 1847	Iron	Ogg
Seelasgen, Province of Brandenburg, Central Prussia		
<b>SEGOWLEE</b> , 1853	Stone	Ck
Fourteen miles east of Bettiah, District of Chumparun, State of Bengal, India		
Sempalatinsk	<b>PAWLODAR</b>	
<b>SENA</b> , 1773	Stone	Cgb
Sena, District of Sigena, Aragon, Spain		
<b>SENECA FALLS</b> , 1850	Iron	Om
Seneca Falls, near Waterloo, Seneca County, New York, U S A		
Seneca River	<b>SENECA FALLS</b>	
<b>SENEGAL</b> 1716	Iron	Ds
Bambuk, Upper Senegal, West Africa		
<b>SENHADJA</b> , 1865	Stone	Cwa
Senhadja, near Aumale, Province of Alger, Algeria, South Africa		
<b>SERES</b> , 1818	Stone	Cg
Seres, Province of Macedonia, Turkey		
<b>SERRANIA DE VARAS</b> , 1875	Iron	Of
Varas, Desert of Atacama, Chili		
<b>SEVILLA</b> , 1862	Stone	Cho
Sevilla, Province of Sevilla, Spain		
<b>SEVRUKOVO</b> , 1874	Stone	Cs
Sevrukovo, District of Belgorod, Govern- ment of Kursh, Central Russia		
<b>SHALKA</b> , 1850	Stone	Chl
Shalka, near Bishunpur, District of Ban- koora, Province of Bengal, India		
<b>SHERGOTTY</b> , 1865	Stone	She
Umjhiawar, Shergotty District, Province of Bengal, India		
<b>SHINGLE SPRINGS</b> , 1869	Iron	Dsh
Shingle Springs, El Dorado County Cali- fornia, U S A		
<b>SHYTAL</b> , 1863	Stone	Cib
Shytal, Madhurpur Jungles, Province of Bengal, India		
<b>SIENA</b> , 1794	Stone	Ch
Campagna Sanese, near Siena, Province of Tuscany, Italy		
<b>SIERRA BLANCA</b> , 1874	Iron	Og
Near Huejuquilla, Canton of Jimenez, State of Chihuahua, Mexico		
Sierra de Chaco	<b>VACA MUERTA</b>	
Sierra de Deesa 1865	<b>COPIAPO</b>	
Sigena	<b>SENA</b>	
Signet Iron	<b>CARLETON-TUCSON</b>	
Sikkensaare	<b>TENNASSILM</b>	
<b>SILVER CROWN</b> , 1887	Iron	Og
Twenty-one miles west of Cheyenne, Lara- mie County, U S A		
Simbirsk, 1818	<b>SLOBODKA</b>	
<b>SINDHRI</b> , 1901	Stone	Cc
Khipro Jaluka, District of Ihar and Parker, Bombay, India		
Siratik	<b>SENEGAL</b>	
<b>SKI</b> , 1848	Stone	Cwa
Ski near Krogstat, Amt Akershuus, Nor- way		
<b>SLAVETIC</b> , 1868	Stone	Cgb
Between Agram and Jaska, Croatia, Austria		
<b>SLOBODKA</b> , 1818	Stone	Cc
Slobodka, District of Juchnow, Government of Smolensk, Russia		
<b>SMITHLAND</b> , 1839	Iron	Db
Smithland, Livingston County, Western Kentucky, U S A		
<b>SMITH'S MOUNTAIN</b> , 1863	Iron	Of
Near Madison, Rockingham County, North Carolina, U S A		



**SMITHVILLE**, 1840 Iron Og  
(Cary Fort) DeKalb County, Tennessee,  
U S A

Smoky Hill River **PRAIRIE DOG CREEK**

**SOKO BANJA**, 1877 Stone Cc  
Banja and vicinity, near Alexinac, Kingdom  
of Servia

**SONE MURA**, 1866 Stone  
Sone Mura, Province of Yamba, Japan

Springbok River **GREAT FISH RIVER**

**SSYROMOLOTOW**, 1873 Iron Om  
Angara, Government of Yeneseisk, Eastern  
Siberia

Staartje **UDEN**

**STALLDALEN**, 1876 Stone Cgb  
Stalldalen, near Kopparberget, Lan of Ore-  
bro, Sweden

**STANNERN**, 1808 Stone Eu  
Stannern and vicinity, District of Iglau,  
Moravia, Austria

**TABARZ**, 1854 Iron Og  
Foot of the Inselberg Saxe-Gotha, Thuringen,  
Prussia

**TABOR**, 1753 Stone Ccb  
Tabor, District of Bechin, Bohemia

**TABORY**, 1877 Stone Ccb  
Tabory and vicinity, District of Ochansk,  
Government of Perm, East Russia

**TADJERA**, 1867 Stone Ct  
Plains of Tajera, ten miles northwest of  
Setif Province of Constantine, Algeria,  
Africa

**TAJGHA**, 1891 Iron Om  
Tajgha, near Krasnojarsk, Government of  
Jeniseisk, Siberia

Taney County **MINCY**

**TANOGAMI**, 1880 Iron Om  
Mount Tanogami, Kurifoto District, Prov-  
ince of Omi, Japan

**TAZEWELL**, 1853 Iron Off  
Ten miles west of Tazewell, Claiborne County,  
East Tennessee, U S A

Temora **NARRABURRA CREEK**

**TENNASSILM**, 1872 Stone Cca  
Farm of Sikkensarre, District of Jerwen,  
Province of Esthland, Baltic Provinces,  
Russia

**TENNANT'S IRON**, 1784 Og  
Collection of Agricultural College near  
Moscow, Russia

**TEPOSCOLULA**, 1804 Iron Of  
(Yanhuitlan) State of Oaxaca, Mexico

Terek **GROSNAJA**

**STAUNTON**, 1858 Iron Om  
Staunton, Augusta County, Virginia, U S A

**STAVROPOL**, 1857 Stone Ck  
Petrovsk, near Stavropol, Causassia, Russia

**STEINBACH**, 1724 Siderolite Si  
Rittersgrun, Saxony, and Breitenbach, Bo-  
hemia

**SUMMIT**, 1870 Iron Ha  
Near Summit, Blount County, Alabama,  
U S A

**SUPUHEE**, 1865 Stone Cgb  
Near Supuhee, District of Goruckpur,  
Northwestern Provinces, India

Surakarta **PRAMBRANAN**

**SURPRISE SPRINGS** 1899 Iron Om  
Surprise Springs, near San Bernardino County  
California, U S A

Szadany **ZSADANY**

## T

**TEOCALTICHE**, 1903 Iron O  
Canton of Teocaltiche, State of Jalisco,  
Mexico

**TERNERA**, 1891 Iron De  
Sierra de Ternera, Atacama, Chili  
Terni **COLLESCIPOLI**

**THUNDA**, 1886 Iron Om  
Windorah, Diamantina District, Queensland,  
Australia

**THURLOW**, 1895 Iron Of  
Thurlow, Hastings County, Canada

**TIESCHITZ**, 1878 Stone Cc  
Near Tieschitz, District of Prerau, Province  
of Moravia, Austria

**TIMOCHIN**, 1807 Stone Cc  
District of Juchnow, Government of Smo-  
lensk, Central Russia

Tipperary 1810 **MOORESFOOT**

**TJABE**, 1869 Stone Ck  
District of Pandangan, Residency of Rem-  
bang, Java

**TLACOTEPEC**, 1903 Iron C  
Tlacotepec, District of Tecamachalco, State  
of Pueblo, Mexico

Tocavita **SANTA ROSA**

**TOKE UCHI MURA**, 1880 Stone Ck  
Yofugori, Tamba, Japan

**TOLUCA**, 1784 Iron Om  
Xiquipico, Mani, Ixtlahuaca, Ocotlan, Valle  
of Toluca, State of Mexico, Mexico

**TOMATLAN**, 1879 Stone C  
Hacienda d'El Gargantillo, eight miles north-  
west of Tomatlan State of Jalisco, Mexico

**TOMHANNOCK**, 1863 Stone Cgb  
Tomhannock Creek, Rensselaer County, New York, U S A

**TONGANOXIE**, 1886 Iron Om  
Tonganoxie, Leavenworth County, Kansas, U S A

**TOUBIL**, 1891 Iron Om  
Two hundred and fifty miles north of Krasnojarsk, District of Atchinsk, Government of Jeniseisk, Siberia

**TOULOUSE**, 1812 Stone Cia  
Toulouse and vicinity, Canton of Grenade, Département de la Haute Garonne, France

**TOUNKIN**, 1824 Stone Cg  
Fortress of Tounkin, two hundred and sixteen verst west southwest of Irkutsk, Siberia

**TOURINNES-LA-GROSSE**, 1863 Stone Cw  
Tourinnes-la-Grosse, near Louvain, Belgium

**UDEN**, 1840 Stone Cwb  
Staartje, near Voelkel, District of Uden, Province of North Brabant Holland

**UDIPI**, 1866 Stone Cga  
Udipi, District of Canara, Malapar Coast, Southern India

**UMBALLA**, 1822 Stone Cga  
Forty miles west of Umballa, Punjaub States, India

**VACA MUERTA**, 1861 Siderolite Mg  
Llano de Vaca Muerta, Desert of Atacama, Chili

**VAGO**, 1668 Stone Ci  
Vago, near Caldiero, east of Verona, Italy

**VAVILOVKA**, 1876 Stone Ro  
Vavilovka, Government of Cherson, Southern Russia

**VERAMIN**, 1880 Siderolite M  
Plain of Veramin, twelve miles east of Teheran, Persia

**VERNON COUNTY**, 1865 Stone Cka  
Vernon County, Wisconsin, U S A

**WACONDA**, 1873 Stone Ccb  
Two miles from Waconda, Mitchell County Kansas

Wadee Bane Khaled **NEJED**

**WAIARAPA**, 1864 Stone C  
Five miles from Turanaki, Province of Wellington, New Zealand

**TRAVIS COUNTY**, 1889 Stone Cs  
Travis County, Central Texas, U S A

**TRENTON**, 1858 Iron Om  
Trenton, Washington County, Wisconsin

**TREZZANO**, 1856 Stone Cca  
Ten miles west-southwest of Brescia, Province of Brescia, Italy

Tschistopol **KISSIJ**

**TUCSON**, 1851 Iron Dm  
Muchachos, Ainsa-Signet mass, Carleton-Tucson mass State of Sonora, Mexico  
Later transferred to Tucson, Arizona, U S A

Tucuman **CAMPO DEL CIELO**

**TULA**, 1846 Iron Obn  
Netschaev, Government of Tula, Central Russia

**TYSNES**, 1884 Stone Cgb  
Estate of Midtvaage, Island of Tysnes, Hardanger Fjord Amt Gergenhus, Norway

**UNION COUNTY**, 1853 Iron Ogg  
Union County, Northern Georgia, U S A

**UTE PASS**, 1894 Iron Ogg  
Ute Pass, Summit County, Colorado, U S A

**UTRECHT**, 1843 Stone Cca  
Blaauw Capel, near Utrecht, Province of Utrecht, Holland

**VICTORIA**, 1871 Iron Om  
Saskatchewan on Iron Creek, northwest of Edmonton, British America

**VICTORIA WEST**, 1862 Iron Ov  
Victoria West, Central Cape Colony, South Africa

**VIRBA**, 1874 Stone Cwa  
Virba (Wirba), Widdin, Bulgaria

Vizigapatam **NEDAGOLLA**

**VOUILLE**, 1831 Stone Cia  
Vouille, near Poitiers, Département de la Vienne, France

**WALDRON'S RIDGE**, 1887 Iron Og  
Near Tazewell, Claiborne County, Tennessee, U S A

**WALKER COUNTY**, 1832 Iron H  
Walker County, Northwestern Alabama, U S A

**WARRENTON**, 1877 Stone Cco  
Five miles from Warrenton, Warren County,  
Missouri, U S A

Washington

**FARMINGTON**

**WEAVER**, 1898 Iron H  
Weaver Mountain, near Wickenburg, Mari-  
posa County, Arizona, U S A

**WELLAND**, 1888 Iron Om  
Welland, Welland County, Ontario, Canada

**WERCHNE DNIEPROWSK**, 1876 Iron Off  
Werchne Dnieprowsk, Government of Ekater-  
inoslow, Russia

**WERCHNE TSCHIRSKAJA**, 1843, Stone Cca  
Province of the Don Cossacks, South Rus-  
sia

**WERCHNE UDINSK**, 1854 Iron Om  
Transbaikalia, Central Siberia

**WESSELY**, 1831 Stone Cga  
Estate of Wessely, near Znorow, District of  
Moravia, Austria

West Liberty

**HOMESTEAD**

**WESTON**, 1807 Stone Ccb  
Weston and vicinity, Fairfield County,  
Connecticut, U S A

White Sulphur Springs

**GREENBRIER COUNTY**

**WICHITA**, 1836 Iron Og  
Wichita County, Northern Texas, U S A

Windorah

**THUNDA**

**WILLAMETTE**, 1902 Iron Om  
Near Willamette Clackamas County, North-  
ern Oregon, U S A

**WITMESS**, 1785 Stone Cc  
Forest of Witmess, six miles southwest of  
Eichstadt, Province of Mittel Franken,  
Bavaria

**WOLD COTTAGE**, 1795 Stone Cwa  
Wold Cottage, County of York, England

**WOOSTER**, 1858 Iron Om  
Wooster, Wayne County, Ohio

## X

Xiquipilco

**TOLUCA**

## Y

**YANHUITLAN**, 1804 Iron Of  
Yanhuitlan, twelve miles northwest of  
Teposcolula, State of Oaxaca, Mexico

**YARDEA STATION**, 1875 Iron Om  
Four miles south of Yardea Station, Gawler  
Range, South Australia

**YATOOR**, 1852 Stone Cc  
Yatoor, near Nellore, Presidency of Madras,  
India

**YODZE**, 1877 Stone Hob  
Yodze, near Ponevej, Government of Kovno,  
Baltic Russia

**YOKOHIMA** Siderolite (doubtful)  
Yokohima, Hiokomo, Japan

**YONATSU**, 1836 Stone  
Bay of Tominaga, District of Kambara,  
Province of Echigo, North Japan

Yorktown

**TOMHANNOCK CREEK**

**YOUNDEGIN**, 1884 Iron Og  
Penkarring Rock, seventy miles east of  
York, West Australia

## Z

**ZABORZIKA**, 1818 Stone Cwa  
Zaborzika, near River Slutsch, south of  
Nograd-Volhynsk, Government of Vol-  
hynia, West Russia

**ZABRODJE**, 1893 Stone Cia  
Zabrodje, Government of Wilna, Baltic Rus-  
sia

**ZACATECAS**, 1792 Iron Obz  
A few miles southwest of Zacatecas, State  
of Zacatecas, Mexico

**ZAVID**, 1897 Stone Cia  
Zavid and vicinity, near Rozanj, District  
of Zwormik, Province of Bosnia, Austria

**ZE BRAK**, 1824 Stone Cc  
Zebrak, near Horowic, District of Beraun  
Bohemia

**ZMENJ**, 1858 Stone Ho  
Zmenj, near Stoln, Government of Minsk  
Russia

**ZSADANY**, 1875 Stone Cc  
Zsadany and vicinity, Temesvar Comitatus  
Hungary

## V GEOGRAPHICAL DISTRIBUTION OF ALL KNOWN METEORITES,

ACCORDING TO COUNTRIES

## NORTH AMERICA.

BRITISH AMERICA AND  
CANADA

Beaver Creek	*S 1893
De Cewsville	S 1887
Madoc	I 1854
Thurlow	I 1888
Victoria	I 1871
Welland	I 1888

## UNITED STATES

Abert Iron	I
Admire	Sid 1902
Algoma	I 1887
Allegan	S 1899
Andover	S 1889
Arlington	I 1894
Ashville	I 1839
Auburn	I 1867
Babbs Mill	I 1842
Bald Eagle	I 1891
Bath	S 1892
Bath Furnace	S 1902
Bear Creek	S 1866
Bethlehem	S 1859
Bishopville	S 1843
Black Mountain	I 1835
Bluff	S 1878
Brenham	Sid 1885
Bridgewater	I 1890
Burlington	I 1819
Butler	I 1874
Cabin Creek	I 1886
Cambria	I 1818
Canyon City	I 1875
Canon Diablo	I 1891
Canton	I 1894
Cape Girardeau	S 1846
Carlton	I 1887
Carthage	I 1844
Casey County	I 1877
Castalia	S 1874
Castine	S 1848
Central Missouri	I 1885
Charlotte	I 1835
Chesterville	I 1847

Chilcat	I 1881	Homestead	S 1875
Chulafinee	I 1873	Hopper	I 1889
Cincinnati	I 1898	Illinois Gulch	I 1899
Cleveland	I 1860	Indian Valley	I 1887
Colfax	I 1880	Iredell	I 1898
Coopertown	I 1860	Ivanpah	I 1880
Cosby's Creek	I 1840	Jackson County	I 1846
Costilla Peak	I 1881	Jamestown	I 1885
Crab Orchard	Sid 1887	Jenny's Creek	I 1883
Cranberry Plains	I 1852	Jerome	S 1894
Cross Roads	S 1892	Jewel Hill	I 1854
Cynthiana	S 1877	Joe Wright	I 1884
Dakota	I 1863	Jonesboro	I 1891
Dalton	I 1877	Kendall County	I 1887
Danville	S 1868	Kenton County	I 1889
Deal	S 1829	Kokomo	I 1862
Deep Spring	I 1846	La Grange	I 1860
Denton County	I 1856	Laurens County	I 1857
Drake Creek	S 1827	Lexington County	I 1880
Duel Hill	I 1873	Lick Creek	I 1879
Eagle Station	Sid 1880	Lime Creek	I 1834
El Capitan	I 1893	Linville	I 1882
Emmitsburg	I 1854	Little Piney	S 1839
Estherville	Sid 1879	Locust Grove	I 1857
Farmington	S 1890	Lonaconing	I 1888
Felix	S 1900	Long Island	S 1892
Ferguson	S 1839	Losttown	I 1867
Fisher	S 1894	Luis Lopez	I 1896
Forest	S 1890	Lumpkin	S 1869
Forsyth	S 1829	Mac Kinney	S 1870
Forsyth County	I 1895	Marion	S 1847
Fort Duncan	I 1852	Marshall County	I 1860
Fort Pierre	I 1856	Mart	I 1898
Franceville	I 1890	Mincy	Sid 1856
Frankfort	I 1866	Monroe	S 1849
Frankfort	S 1868	Morristown	Sid 1887
Glorieta Mountain	I 1884	Mount Joy	I 1887
Grand Rapids	I 1883	Mount Vernon	Sid 1868
Greenbrier County	I 1880	Murfreesboro	I 1847
Guilford County	I 1820	Murphy	I 1899
Hammond	I 1884	Nanjemoy	S 1825
Harrison County	S 1859	Nelson County	I 1860
Hayden Creek	I 1891	Ness County	S 1893
Hendersonville	S 1901	New Concord	S 1860
Hollands Store	I 1887	Niagara	I 1879

\*S = Stone I = Iron Sid = Siderolite

Nobleborough	S 1823	Shingle Springs	I 1869	Bocas	S 1884
Oakley	S 1895	Silver Crown	I 1887	Cacaria	I 1867
Oktibbeha	I 1857	Smithland	I 1839	Casas Grandes	I Prehist
Oroville	I 1894	Smith's Mountain	I 1863	Charcas	I 1804
Oscuro Mountain	I 1895	Smithville	I 1840	Chichimegulas	I 1901
Ottawa	S 1896	Staunton	I 1858	Chupaderos	I 1852
Persimmon Creek	I 1903	Summit	I 1890	Coahuila	I 1837
Petersburg	S 1855	Surprise Springs	I 1899	Cosina	S 1844
Pipe Creek	S 1887	Tazewell	I 1853	Descubridora	I 1780
Pittsburg	I 1850	Tombigbee River	I 1878	El Tule	I 1889
Plymouth	I 1893	Tom Hannock Creek	S 1863	La Charca	S 1878
Port Orford (?)	Sid 1859	Tonganoxie	I 1886	Mazapil	I 1885
Prairie Dog Creek	S 1893	Travis County	S 1889	Misteca	I 1804
Pricetown	S 1893	Trenton	I 1858	Moctezuma	I 1899
Putnam County	I 1839	Union County	I 1854	Morito	I 1600
Red River	I 1808	Ute Pass	I 1894	Pacula	S 1881
Reed City	I 1895	Vernon County	S 1865	Rancho de la Pila	I 1804
Richmond	S 1828	Waconda	S 1874	Rancho de la Presa	S 1899
Rochester	S 1876	Waldron Ridge	I 1887	Rodeo	I 1850
Ruffs Mountain	I 1850	Walker County	I 1832	San Francisco del	
Rushville	S 1866	Warrenton	S 1877	Mezquital	I 1867
Russel Gulch	I 1863	Weaver	I 1898	Santa Apolonia	I 1872
Sacramento Mountains	I 1896	Weston	S 1807	Sierra Blanca	I 1804
Saint Francois County	I 1863	Wichita	I 1836	Teocaltiche	I 1903
Saint Genevieve	I 1888	Willamette	I 1902	Teposcolula	I 1804
Saline	S 1898	Wooster	I 1832	Tlacotepec	I 1903
Salt Lake City	S 1869			Toluca	I 1784
Salt River	I 1850	<b>MEXICO</b>		Tomatlan	S 1879
San Angelo	I 1897	Adargas	I 1780	Tucson	I 1660
San Emigdio	S 1887	Amates	I 1889	Yanhutlan	I 1804
San Pedro Springs	S 1887	Apoala	I 1890	Zacatecas	I 1792
Scottsville	I 1867	Arispe	I 1898		
Searsmont	S 1871	Avilez	S 1850		
Seneca Falls	I 1850	Bacubirito	I 1871	<b>GREENLAND</b>	
		Bella Roca	I 1888	Cape York	I 1818

## CENTRAL AMERICA AND WEST INDIES.

<b>COSTA RICA</b>	<b>HONDURAS</b>	<b>JAMAICA</b>	<b>CUBA</b>
Heredia S 1857	Rosario I 1897	Lucky Hill I 1885	Cuba I 1857

## SOUTH AMERICA.

COLOMBIA				PATAGONIA	
Rasgata	I 1810	Imilac	Sid 1800	Caperr	I 1869
Santa Rosa	I 1810	Joel's Iron	I 1858		
		Juncal	I 1866	<b>ARGENTINE</b>	
		La Primitiva	I 1888	Campo del Cielo	I 1783
		Llano del Inca	Sid 1888	Indio Rico	S 1900
		Lutschaunig	S 1860	Lujan	Sid1892
		Mejillones	Sid 1874	Nogoya	S 1879
		Merceditas	I 1884		
		Pan de Azucar	I 1887	<b>BRAZIL</b>	
		Puquios	I 1885	Angra dos Reis	S 1869
		San Cristobal	I 1896	Bendego	I 1784
		Serrania de Varas	I 1875	Itapicuru Mirim	S 1879
		Ternera	I 1891	Macao	S 1836
		Vaca Muerta	Sid 1861	Minas Geraes	S 1888
				Santa Barbara	S 1893
CUBA					
Barranca Blanca	I 1855				
Cachuyuyal	I 1874				
Calderilla	Sid 1883				
Carcote	S 1888				
Copiapo	I 1863				
Dona Inez	Sid 1888				
Iquique	I 1871				
Ilumae	I 1870				

## EUROPE.

## ENGLAND

Aldsworth	S 1835
Launton	S 1830
Middlesborough	S 1881
Rowton	I 1876
Wold Cottage	S 1795

## IRELAND

Crumlin	S 1902
Dundrum	S 1865
Killeter	S 1844
Limerick	S 1813
Moorefort	S 1810

## SCOTLAND

High Possil	S 1804
Perth	S 1830

## FRANCE

Agen	S 1814
Alais	S 1806
Angers	S 1822
Apt	S 1803
Asco	S 1805
Aubres	S 1836
Aumeres	S 1842
Ausson	S 1858
Barbotan	S 1790
Bueste	S 1859
Chantonnay	S 1812
Charsonville	S 1810
Chassigny	S 1815
Chateau Renard	S 1841
Clohars	S 1822
Epinal	S 1822
Esnandes	S 1837
Favars	S 1844
Galapian	S 1826
Grazac	S 1885
Groslee	I 1812
Jonsac	S 1819
Juvinas	S 1821
Kerilis	S 1874
Kernouve	S 1819
La Becasse	S 1879
Laborel	S 1871
La Caille	I 1828
L'Aigle	S 1803
Lance	S 1872
Lancon	S 1897
Le Pressoir	S 1845
Les Ormes	S 1857

Le Teilleul	S 1845
Luce	S 1768
Luponnas	S 1753
Marmande	S 1848
Mascombes	S 1835
Monthivault	S 1838
Mornans	S 1875
Orgueil	S 1864
Ornans	S 1868
Quincay	S 1851
Saint Mesmin	S 1866
Salles	S 1798
San Caprais de Quinsac	S 1843
San Christopher la Char-treuse	S 1841
Sauguis	S 1868
Toulouse	S 1812
Vouille	S 1831

## ITALY

Albareto	S 1766
Alessandria	S 1860
Alfianello	S 1883
Assisi	S 1886
Borgo San Donnino	S 1808
Cereseto	S 1840
Collescipoli	S 1890
Girgenti	S 1853
Monte Milone	S 1846
Motta di Conti	S 1868
Orvinio	S 1872
Renazzo	S 1824
Siena	S 1794
Trenzano	S 1856
Vago	S 1668

## SPAIN

Barea	Sid 1842
Berlanguillas	S 1811
Cabezzo de Mayo	S 1870
Canellas	S 1861
Cangas de Onis	S 1866
Gerona	S 1899
Guarena	S 1892
Madrid	S 1896
Molina	S 1858
Nulles	S 1851
Oviedo	S 1856
Quesa	I 1898
Roda	S 1871
Sevilla	S 1862
Sena	S 1773

## PORTUGAL

Sao Juliao	I 1883
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## GERMANY

Barntrup	S 1886
Bitburg	Sid 1802
Bremervorde	S 1855
Darmstadt	S 1804
Ensisheim	S 1492
Erleben	S 1812
Gnadenfrei	S 1879
Gruneberg	S 1841
Gutersloh	S 1851
Hainholz	Sid 1856
Hungen	S 1877
Ibbenbuhren	S 1870
Klein-Menow	S 1862
Klein-Wenden	S 1843
Krahenberg	S 1869
Linum	S 1854
Mainz	S 1852
Meuselbach	S 1897
Nenntmannsdorf	I 1872
Obernkirchen	I 1863
Politz	S 1819
Schellin	S 1715
Schonenberg	S 1846
Schwetz	I 1850
Seelasgen	I 1847
Steinbach	Sid 1724
Tabarz	I 1854
Witmess	I 1785

## AUSTRIA

Alt-Biela	I 1899
Blansko	S 1833
Bohumilitz	I 1829
Braunau	I 1847
Elbogen	I 1785
Lenarto	I 1814
Lissa	S 1808
Mauerkirchen	S 1768
Mezo-Madaras	S 1852
Milena	S 1842
Mocs	S 1882
Muhlau	S 1877
Ploschkowitz	S 1723
Slavetic	S 1868
Stannern	S 1808
Tabor	S 1753
Trieschitz	S 1878
Wessely	S 1831

Zavid S 1897  
Zebrah S 1824

**HUNGARY**

Borkut S 1852  
Gross-Divina S 1837  
Hraschina I 1751  
Kaba S 1857  
Kakowa S 1858  
Knyahunya S 1866  
Lenarto I 1814  
Magura I 1840  
Nagy-Borove S 1895  
Nagy-Vaszonj S 1890  
O-Feherto S 1900  
Ohaba S 1857  
Zsadany S 1875

**SERVIA**

Guca S 1891  
Jelica S 1889  
Sokobanja S 1877

**TURKEY**

Seres S 1818  
Wirba S 1874

**SWITZERLAND**

Palezieux S 1901  
Rafruti I 1886

**BELGIUM**

Lesves S 1896  
Saint Dennis Westrem S 1855  
Tourinnes la Grosse S 1863

**HOLLAND**

Uden S 1840  
Utrecht S 1843

**DENMARK**

Mern S 1878

**NORWAY**

Morradal I 1892  
Ski S 1848  
Tysnes S 1884

**SWEDEN**

Hessle S 1869  
Lundsgard S 1889  
Stalldalen S 1876

**RUSSIA**

Abo S 1840  
Augustinowka I 1890  
Bachmut S 1814  
Bialystok S 1827  
Bielokrynitschie S 1887  
Bjelaja-Zerkow S 1796  
Bjurbol S 1899  
Borodino S 1812  
Botschetschki S 1823  
Brahm Sid 1810  
Buschhof S 1863  
Dolgowoh S 1864  
Gross-Liebenthal S 1881  
Grosnaja S 1861  
Hvittis S 1901  
Indarch S 1891  
Kharkow S 1787  
Kikino S 1809  
Kissij S 1899  
Krasnoj-Ugol S 1829

Kuleschowka S 1811  
Lenorka S 1902  
Lixna S 1820  
Luotolaks S 1813  
Marjahlahti Sid 1902  
Mighei S 1889  
Misshof S 1890  
Mordvinovka S 1826  
Nerft S 1864  
Nowo Urei S 1886  
Oczeretna S 1871  
Oesel S 1822  
Okniny S 1834  
Pawlowka S 1882  
Pillstfer S 1863  
Pultusk S 1868  
Rakowka S 1878  
Sarepta I 1854  
Sawtschenskoje S 1894  
Scholakoff S 1814  
Sevrukovo S 1874  
Simbrisk Partsch S 1838  
Slobodka S 1818  
Stavropol S 1857  
Tabory S 1887  
Tennesilm S 1872  
Timochin S 1807  
Tula I 1846  
Vavilovka S 1876  
Werchne Dnieprowsk I 1876  
Werchne Tschurskaja S 1843  
Yodzie S 1877  
Zaborzika S 1818  
Zabrodje S 1893  
Zmenj S 1858

**AFRICA****NORTH AFRICA (ALGIERS)**

Dellys I 1865  
Feid Chair S 1875  
Hamiet el Beguel I 1888  
Hassi Jekna I 1890  
Senhadja S 1865  
Tadjera S 1867

**EAST AFRICA**

Duruma S 1853  
Ergheo S 1889  
Peramiho S 1899  
Mauritius (Island) S 1802

**SOUTH AFRICA**

Cold Bokkeveld S 1838  
Cronstadt S 1877

Daniel's Kuil S 1868  
Hex River I 1882  
Cape of Good Hope I 1793  
Kokstad I 1887  
Lion River I 1853  
Matatiela I 1885  
Orange River I 1856  
Orange River S 1887  
Piquetberg S 1881  
Victoria West I 1862

**WEST AFRICA**

Great Fish River I 1836  
Lion River I 1853  
Mukerop I 1899  
Senegal I 1716

**CENTRAL AFRICA**

N'Goureyima I 1900  
Zomba S 1899

**ASIA MINOR**

Adalia S 1883  
Aleppo S 1873

**PERSIA**

Veramin Sid 1880

**ARABIA**

Kaaba (?) S 1772  
Nejed I 1864

**SIBERIA**

Angara	I 1885
Bischtube	I 1888
Doroninsk	S 1805
Karakol	S 1840
Pawlodar	Sid 1885
Ssyromolotow	I 1873
Medwedewa	Sid 1749
Nochtuisk	I 1876
Petropavlosk	I 1841
Tajgha	I 1891
Toubil	I 1861
Tounkin	S 1824
Werchne Udinsk	I 1854

**JAPAN**

Fukutomi	S 1882
Hakata	S 1897
Kesen	S 1850
Maeme	S 1886
Ogi	S 1830
Oshima	S 1886
Sone Mura	S 1886
Tanogami	I 1880
Take Uchi Mura	S 1880
Yonatsu	S 1836

**PHILIPPINES**

Mexico (Pampanga)	S 1859
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**INDIA**

Agra	S 1822
Akburpur	S 1838
Ambapur Nagla	S 1895
Assam	S 1846
Benares	S 1798
Bherai	S 1893
Bishunpur	S 1895
Bori	S 1894
Bustee	S 1852
Butsura	S 1861
Chail	S 1814
Chandakapur	S 1838
Chandpur	S 1885
Charwallas	S 1834
Dandapur	S 1878
Dhulia	S 1877

Dhurmsala	S 1860
Donga Kohrod	S 1899
Durala	S 1815
Dyalpur	S 1872
Futtehpur	S 1822
Gambat	S 1897
Goalpara	S 1868
Gopalpur	S 1865
Gurram Konda	S 1814
Iharoata	S 1887
Jamkheir	S 1866
Jhung	S 1873
Judesegei	S 1876
Kae	S 1838
Kahangarai	S 1890
Kalumbi	S 1879
Khairpur	S 1873
Kheragur	S 1860
Khetree	S 1867
Kodaikanal	I 1898
Kusial	S 1860
Lodhran	S 1868
Manbhoom	S 1863
Manegaum	S 1843
Meerut	S 1860
Mhow	S 1827
Mooradabad	S 1808
Motecka Nugla	S 1868
Muddoor	S 1865
Nageria	S 1875
Nammianthal	S 1886
Nawapali	S 1890
Nedagolla	I 1870
Parnalee	S 1857
Pirgunje	S 1882
Pirthalla	S 1884
Pokhra	S 1866
Pulsora	S 1863
Sabetmahet	S 1885
Segowlee	S 1853
Shalka	S 1850
Shergotty	S 1865
Shytal	S 1863
Sindhri	S 1901
Sitathali	S 1875
Supuhee	S 1865
Udipi	S 1866

Umbala	S 1822
Yatoor	S 1852

**JAVA**

Bandong	S 1871
Djati-Pengilon	S 1884
Ngawi	S 1883
Prambanan	I 1874
Tjabe	S 1869

**AUSTRALIA**

Ballinoo	I 1893
Baratta	S 1845
Beaconsfield	I 1897
Bingera	I 1880
Bugaldi	I 1900
Cowra	I 1888
Cranbourne	I 1854
Eli Eluat	I 1889
Gilgom Station	S 1889
Macquaire River	Sid 1857
Moonbi	I 1892
Mooranoppin	I 1893
Mount Browne	S 1902
Mount Dyring	Sid 1903
Mount Stirling	I 1892
Mungindi	I 1897
Narrabura Creek	I 1854
Nocoleche	I 1895
Queensland	I 1892
Rhine Valley	I 1901
Roebourne	I 1892
Thunda	I 1886
Yardea Station	I 1875
Youndegin	I 1884

**NEW ZEALAND**

Makariwa	S 1879
Wairarapa	S 1864

**TASMANIA**

Blue Tier	I 1890
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**SANDWICH ISLANDS**

Honolulu	S 1825
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## VI TAXONOMY

The classification which we have adopted in this catalogue is that of Dr. Aristides Brezina, of Vienna, whose study and published investigations of Meteorites have placed him for the last quarter of a century in leading rank among European workers in this field.

Dr. Brezina—for many years director of the Mineral Cabinets of the Royal Museum of Vienna—first announced and employed his system of classification in the catalogue of the Meteorites of this great museum in 1885. In a second catalogue in 1896, he repeated the same classification with such modifications as further study and the general advance of the science—largely due to added discoveries and new meteorite falls—had induced.

Now, under date of January, 1904, Dr. Brezina has favored me with his last revision of his system, with the privilege of here presenting it for the first time in printed form.

## DR. BREZINA'S SYSTEM OF METEORITE CLASSIFICATION \*

## I. STONES    Silicates Prevalent

## A. ACHONDRITES

*Stones poor in Iron    In the main without round Chondri*

- 1 Chladnite (Chl)    Chiefly Bronzite  
Ibbenbühren    Manegaon    Shalka
- 2 Chladnite, veined (Chla)    Bronzite, black or metallic veined  
Bishopville
- 3 Angrite (A)    Chiefly Augite  
Angra dos Reis
- 4 Chassignite (Cha)    Chiefly Olivine  
Chassigny
- 5 Bustite (Bu)    Bronzite with Augite  
Aubres    Bustee
- 6 Amphoterite (Am)    Bronzite with Olivine  
Jelica    Manbhoom
- 7 Rodite (Ro)    Bronzite with Olivine, breccialike  
Bandong    Roda    Vavilovka
- 8 Eukrite (Eu)    Augite with Anorthite  
Adalia    Constantinople    Jonzac    Juvinas    Peramiho    Stannern
- 9 Shergottite (She)    Augite with Maskelynite  
Shergotty (Umjhiawar)

\*N.B.—While following Dr. Brezina's text as closely as possible in our English translation of his manuscript as to the definitions of the groups we have taken the liberty of giving our own chosen names for the meteorites themselves which he has ranged under each group. This has been essential for the unity of our catalogue. Nothing will be perverted by our giving as our accepted name to a given meteorite what he has given as synonym of the same fall.

- 10 Howardite (Ho) Bronzite, Olivine, Augite and Anorthite  
Bialystock Frankfort La Vivionnère Luotolaks Nobleborough Pavlovka Peters-  
burg Saint Nicolas Zmenj
- 11 Howardite, breccialike (Hob) Bronzite, Olivine, Augite and Anorthite,  
breccialike  
Yodze
- 12 Leucituranolite (L) Leucite, Anorthite, Augite and Glass  
Schafstadt

## B CHONDRITES

*Bronzite, Olivine and Nickel Iron With Round or Rounded and Polyhedral Chondri*

- 13 Howarditic Chondrite (Cho) Polyhedral Segregations preponderating, round  
Chondri scarce Crust bright in parts  
Borgo San Donno, Harrison County, Krahenberg, Mauritius, Ottawa, Santa Barbara,  
Sevilla, Siena Sitathali
- 14 Howarditic Chondrite, veined (Choa) Polyhedral Segregations preponderat-  
ing, round chondri scarce Metallic or black veins  
Itharaota (Lalitpur)
- 15 White Chondrite (Cw) White, rather friable mass with few Chondri, mostly  
white  
Bachmut, Bocas, Cabezzo de Mayo, De Cewsville, Dolgowoli, High Possil, Karakol, Kusiali,  
La Becasse, Les Ormes, Lesves, Linum, Lundsgard, Mascombes, Mauerkirchen, Middles-  
borough, Milena, Montlivault, Mooradabad, Mordvinovka, Oesel, Ogi, Oviedo, Phom-  
pehn, Pricetown, San Pedro, Tourinnes
- 16 White Chondrite, veined (Cwa) White, rather friable mass with few, chiefly  
white, Chondri Metallic or black veins  
Allahabad, Angers, Asco, Aumieres, Bherai, Buschhof, Castine, Chandpur, Drake Creek,  
Dhulia, Forsyth, Galapian, Gurgenti, Gross Liebenthal, Honolulu, Kalumbi, Kharkow,  
Killeter, Kikino, Kuleschovka, Luce, Madrid, Marion, Minas Geraes, Mocs, Purgunje,  
Poltz, Sauguis, Schonenberg, Scholokov, Senhadja, Ski, Slobodka-Partsche, Virba,  
Wold Cottage, Zaborzika, Zomba
- 17 White Chondrite, breccialike (Cwb) White, rather friable mass with few,  
chiefly white, Chondri, breccialike  
Aleppo, Gerona, Lissa, Monte Milone, Pacula, Uden
- 18 Intermediate Chondrite (Ci) Firm, polishable mass, white and gray Chondri,  
breaking with matrix  
Alfianello, Butsura, Canellas, Charwallas, Dhurmsala, Deal, Favars, Mhow, Rakowka,  
Saint Caprais, Vago
- 19 Intermediate Chondrite, veined (Cia) Firm, polishable mass, white and  
gray Chondri, breaking with matrix  
Agen, Barntrop, Bath Furnace, Berlanguillas, Bori, Chateau Renard, Dandapur, Durala,  
Duruma, Fisher, Ghambat, Krahenberg, Lancon, Long Island, Macao, Maeme, Mainz,  
Nerft, New Concord, Orange River, Salles, Schellin, Toulouse, Vouille, Zabrodje, Zavid
- 20 Intermediate Chondrite, brecciated (Cib) Firm, polishable mass, white and  
gray Chondri, breaking with matrix, breccialike  
Bielokrynitschie, Chandakapur, Laborel, L'Aigle, Luponnas, Ness County, Pulsora, Saint  
Mesmin, Shytal

- 21 Gray Chondrite (Cg) Firm, gray mass, Chondri of various kinds, breaking with matrix  
Botschetschki, Cross Roads, Cynthiana, Esnandes, Higashi Koen, Knyahinya, Lutschaunig  
Nagy Borove, Seres, Tounkin
- 22 Gray Chondrite, veined (Cga) Firm, gray mass, Chondri of various kinds breaking with matrix, veined  
Agra, Aldsworth, Alesandria, Apt, Barbotan, Blansko, Charsonville, Cronstadt, Danville,  
Darmstadt, Fukutomi, Gruneberg, Hungen, Kakowa, Kerils, Lasdany, Lerici, Monroe,  
Mornans, Oczeretna, Ohaba, Parnallee, Udipi, Umballa, Wessely
- 23 Gray Chondrite, breccialike (Cgb) Firm, gray mass, Chondri of various kinds, breaking with matrix, breccialike  
Akburpur, Assam, Barratta, Borodino, Beuste, Cangas de Onis, Castalia, Chantonnay,  
Clohars, Doroninsk, Homestead, Khetrie, Limerick, Makariwa, Mezo-madaras, Mexico,  
Molina, Nulles, Okuny, Pultusk, Quncay, Salt Lake City, Sena, Slavetic, Supuehe,  
Stalldalen, Tomhannock, Tysnes
- 24 Orvinite (Co) Black, infiltrated mass, fluidal structure, surface uneven, discontinuous crust  
Orvinio
- 25 Tadjerite (Ct) Black, semi-glassy mass without crust on surface  
Tadjera
- 26 Black Chondrite (Cs) Dark or black mass, Chondri mostly of various colors, breaking with matrix  
Bishunpur, Grossnaya, MacKinney, Renazzo, Sevrukovo
- 27 Black Chondrite, veined (Csa) Dark or black mass, Chondri of various colors in the main, breaking with matrix, veined  
Farmington
- 28 Ureilite (U) Black mass, chondritic or granular, iron in veins or incoherent  
Dyalpur, Goalpara, Nowo Urei
- 29 Carbonaceous Chondrite (K) Dull black, friable Chondri with free carbon and of low specific gravity, metallic iron nearly or wholly wanting  
Alais, Cold Bokkeveld, Grazac, Kaba, Mighei, Nogoya, Nawapah, Orgueil
- 30 Carbonaceous Chondrite, spherulitic (Kc) Dull gray or black friable mass with free carbon, chondri not breaking with matrix, metallic nickel-iron  
Felix, Lancé
- 31 Carbonaceous Chondrite, spherulitic, veined (Kca) Dull black, firm mass with free carbon, Chondri not breaking with matrix, metallic nickel-iron, metallic veins  
Indarch
- 32 Spherulitic Chondrite (Cc) Friable mass with firm Chondri of radiate structure, not breaking with matrix  
Albareto, Andover, Assisi, Ausson, Avilez, Benares, Bjelaja-Zerkov, Borkut, Cape Girardeau,  
Collescipoli, Epinal, Gnadenfrei, Gopalpur, Gross Divna, Guca, Hessle, Itapicuru-Mirim,  
Jhung, Judesegeri, Kaee, Kheragur, Krasnoj Ugol, Le Pressoir, Misshof, Montignac,  
Motta di Conti, Mount Browne, Muddoor, Muhlau, Nanjemoy, Nellore, Pine Bluff,  
Praskoles, Quenggouk, Rochester, San Emigdio, Seasmont, Sindhi, Slobodka, Sokobanja, Tieschitz, Timochin, Tomatlan, Torre, Witmess, Yatoor, Zebrak, Zsady

- 33 Spherulitic Chondrite, veined (Cca) Friable mass with firm Chondri of radiate structure, not breaking with matrix, black or metallic veins  
Bjurböle, Nammianthal, Phu Hong, Piquetberg, Saint Denis, Tennassilm, Trenzano, Utrecht, Werchne Tschirskaja
- 34 Spherulitic Chondrite, breccialike (Ccb) Friable, breccialike mass with firm Chondri of radiate structure, not breaking with matrix  
Bath, Bremervorde, Cereseto, Feid Chair, Forest, Gutersloh, Heredia, Kesen, Krawin, Mooresfort, Ploschkowitz, Tabor, Waconda, Weston
- 35 Ornansite (Cco) Friable mass of Chondri  
Allegan, Ornans, Warrenton
- 36 Ngawite (Ccn) Friable, breccialike mass of Chondri  
Ngawi
- 37 Spherulitic Chondrite, crystalline (Cck) Slightly friable crystalline mass with firm Chondri of radiate structure, some breaking with matrix  
Ambapur Nagla, Beaver Creek, Bethlehem, Jerpme, Lumpkin, Menow, Palézieux, Prairie Dog Creek, Richmond, Saline, Sawtschenskoje
- 38 Spherulitic Chondrite, crystalline, veined (Ccka) Slightly friable crystalline, veined mass with firm Chondri of radiate structure, some breaking with matrix  
Meuselbach
- 39 Spherulitic Chondrite, crystalline, breccialike (Cckb) Slightly friable, crystalline, breccialike mass with firm Chondri of radiate structure, some breaking with matrix  
Pirhalla
- 40 Crystalline Chondrite (Ck) Hard crystalline mass with firm Chondri of radiate structure, breaking with matrix  
Carcote, Cosina, Daniel's Kul, Djati-Pengilon, Dundrum, Erxleben, Gilgoin Station, Guarena, Indio Rico, Khairpur, Klem-wenden, Moteeka-Nugla, Oakley, Pillistfer, Pokra, Segowlie, Sumbursk-Partsch, Stavropol, Tjabe, Toke-uchi-mura
- 41 Crystalline Chondrite, veined (Cka) Hard, crystalline, veined mass with firm Chondri of radiate structure, breaking with matrix  
Kernouvé, Pipe Creek Vernon County
- 42 Crystalline Chondrite, breccialike (Ckb) Hard, crystalline, breccialike mass with firm Chondri of radiate structure, breaking with matrix  
Bluff, Ensisheim, Ergheo

## C ENSTATITE-ANORTHITE-CHONDRITES

*Enstatite, Anorthite and Nickel Iron with Round Chondri*

- 43 Crystalline Enstatite-Anorthite-Chondrite (Cek) Hard crystalline mass with firm Chondri of radiate structure, breaking with matrix  
Hvittus

## D SIDEROLITES

*Transition of Stones to Iron Nickel-Iron in the mass cohering and showing as separate grains in section*

- 44 Mesosiderite (M) Crystalline Olivine and Bronzite with Iron  
Barea, Dona Inez, Estherville, Hamholz, Llaño del Inca, Lujan, Mincy, Veramin
- 45 Grahamite (Mg) Crystalline Olivine, Bronzite and Plagioclase with Iron  
Crab Orchard, Morristown, Vaca Muerta
- 46 Lodhranite (Lo) Granular, crystalline Olivine and Bronzite with Nickel Iron  
Lodhran

## II IRONS Metallic Constituents Prevalent or Forming Entire Mass

## E LITHOSIDERITES

*Transition from Stones to Iron Nickel-Iron cohering in mass and in sections*

- 47 Siderophyre (Si) Grains of Bronzite with accessory Asmanite in Trias  
Stembach
- 48 Pallasite Krasnojarsk Group (Pk) Rounded Crystals of Olivine in Trias  
Anderson, Brenham, Caldeilla, Finmarken, Medwedewa, Mount Dyrning, Mount Vernon,  
Pavlodar, Port Orford
- 49 Pallasite Rokicky Group (Pr) Polyhedral crystals of Olivine, partly  
broken, and fragments separated by Nickel-Iron  
Admire, Brahın, Eagle Station
- 50 Pallasite Imlac Group (Pi) Olivine crystals fissured and compressed  
Imlac, Marjalahti
- 51 Pallasite Albacher Group (Pa) Olivine crystals in fine, brecciated Trias  
Albacher Muhle

## F OCTAHEDRITES

*Kamacite, Taenite and Plessite in Lamellae Concameration of the four octahedron faces*

- 52 Finest Octahedrite (Off) Lamellae up to 0.2 mm in thickness  
Bacubirito, Ballinoo, Butler, Carlton, Cowra, Grosslè, Laurens, Mart, Mukerop, Mungindi,  
Salt River, Tazewell, Tocavita, Werchne Dneprowsk
- 53 Fine Octahedrite Victoria Group (Ofv) Not well defined  
Victoria West
- 54 Fine Octahedrite (Of) Thickness of Lamellae 0.2-0.4 mm  
Alt Biela, Apoala, Augustinowka, Bear Creek, Bella Roca, Bethany, Boogaldi, Bridge-  
water, Cambria, Charlotte, Chupaderos, Cuernavaca, Grand Rapids, Hassi Jekna,  
Jamestown, Jewell Hill, Jonesboro, La Grange, Madoc, Mantos Blancos, Misteca,  
Moonbi, Obernkirchen, Prambanan, Putnam County, Quesa, Russel Gulch, Saint Gene-  
vieve, Serrania de Varas, Smith's Mountain, Thurlow, Yanhuatlan

- 55 Medium Octahedrite (Om) Thickness of Lamellae 0.5-1.0 mm  
 Abert Iron, Adargas, Algoma, Arlington, Baird's Farm, Bald Eagle, Burlington, Cabin Creek, Caperr, Cape York, Carthage, Charcas, Chulafinnee, Cleveland, Coopertown, Costilla Peak, Dalton, Dellys, Denton, Descubridora, Elbogen, El Capitan, Emmitsburg, Fort Pierre, Frankfort, Guilford, Hamet-el-Beguel, Hayden Creek, Hraschina, Ivanpah, Jackson, Joe Wright, Joels Iron, Juncal, Kenton County, Kokstad, LaCaille, Lenarto, Losttown, Lucky Hill, Marshall County, Matatitla, Mazapil, Merceditas, Misteca, Moctezuma, Morito, Murfreesboro, Nagy-Vazsony, Nejed, Nocolche, Orange River, Oroville, Persimmon Creek, Petropavlovsk, Plymouth, Puquios, Rancho de la Pila, Reed City, Red River, Rhine Valley, Rodeo, Roebourne, Rowton, Ruff's Mountain, Russell Gulch, Sacramento Mountains, San Angelo, Schwetz, Seneca Falls, Ssyromolotow, Staunton, Surprise Springs, Tajgha, Tarapaca, Thunda, Toluca, Tomatlan, Tonganoxie, Toubil, Trenton, Victoria, Welland, Werchne Udinsk, Wooster
- 56 Broad Octahedrite (Og) Thickness of Lamellae 1.5-2.0 mm  
 Bendego, Bischtube, Black Mountain, Bohumilitz, Cañon Diablo, Casey County, Cranbourne, Cosby's Creek, Duel Hill, Jenny's Creek, Lexington County, Lonaconing, Magura, Mount Stirling, Niagara, Nochtuisk, Oscuro Mountains, Pan de Azucar, Queensland, Rosario, Saint Francois County, Sarepta, Sierra Blanca, Silver Crown, Smithville, Tabarz, Waldron Ridge, White Sulphur Springs, Wichita, Willamette, Youndegin
- 57 Broadest Octahedrite (Ogg) Thickness of Lamellae 2.5 mm and more  
 Arispe, Central Missouri, Dakota, Mooranoppin, Mount Joy, Narrabura Creek, Nelson County, Pittsburg, Sao Juliao de Moreira, Seelassen, Union County, Ute Pass
- 58 Brecciated Octahedrite Kodaikanal Group (Obk) Fine Octahedrite, brecciated, with grains of Silicate  
 Kodaikanal
- 59 Brecciated Octahedrite Netschaev Group (Obn) Medium Octahedrite, with grains of Silicate  
 (Netschaev) Tula
- 60 Brecciated Octahedrite Zacatecas Group (Obz) Grains of Octahedral Iron with Spherules of Troilite  
 Barranca Blanca, Tocavita, Zacatecas
- 61 Brecciated Octahedrite N'Gourema Group (Obzg) Molten and drawn-out Iron of Zacatecas type  
 N'Gourema
- 62 Brecciated Octahedrite Copiapo Group (Obc) Octahedral Iron and Silicate Grains mixed  
 Copiapo
- 63 Octahedrite Hammond Group (Oh) Lamellae blended with dark or black points  
 Cacania, Hammond, Reed City

## G HEXAHEDRITES

*Structure and Cleavage Hexahedral*

- 64 Normal Hexahedrite, not granular (H)  
 Auburn, Braunau, Coahuila, Fort Duncan, Hex River, Iredell, Lick Creek, Lime Creek, Murphy, Nenntmansdorf, Scottsville, Walker County, Weaver

- 65 Granular Hexahedrite (Ha) Structure and cleavage running through entire mass, which consists of grains with differently oriented sparkles  
Bingara, Hollands Store, Indian Valley, Mejillones, Summit, Tombigbee River
- 66 Brecciated Hexahedrite (Hb) Mass consisting of differently oriented hexahedral grains  
Kendall County

## H ATAXITES

*Structure Interrupted*

- 67 Cape Group (Dc) Rich in Nickel Sharp, hexahedral (?) etching bands in dull mass  
Cape of Good Hope, Iquique, Kokomo, Ternera
- 68 Shingle Springs Group (Dsh), Rich in Nickel Rounded and elongated blebs arranged in parallel rows  
Shingle Springs
- 69 Babb's Mill Group (Db) Rich in Nickel Homogeneous mass without lustre  
Babb's Mill, Deep Springs, Morradal, Octibbeha, Smithland
- 70 Linnville Group (Dl) Rich in Nickel Veined or latticed meandering mesh-work  
Dehesa, Linnville, San Cristobal, Ternera
- 71 Nedagolla Group (Dn), Poor in Nickel Grained No swellings  
Forsyth, Illinois Gulch, Nedagolla, Rafruti, Wohler's Iron
- 72 Siratik Group (Ds) Poor in Nickel Swellings, incisions or enveloped Rhabdites  
Campo del Cielo, Chesterville, Cincinnati, Locust Grove, Rasgata, San Francisco del Mezquital, Senegal
- 73 Primitiva Group (Dp) Poor in Nickel Silky streaks and lustre  
La Primitiva
- 74 Muchachos Group (Dm) Poor in Nickel Granular Porphyritic with Forsterite  
Muchachos

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N B—On the following page is given the Taxonomic status of the Ward-Coonley collection In the summary to this, where "Localities existing" are given at "610," it is intended to say that there are 610 kinds (out of a total recorded number of reputed Meteorites of about 680) which are so well known and studied that their taxonomic position has been fairly established

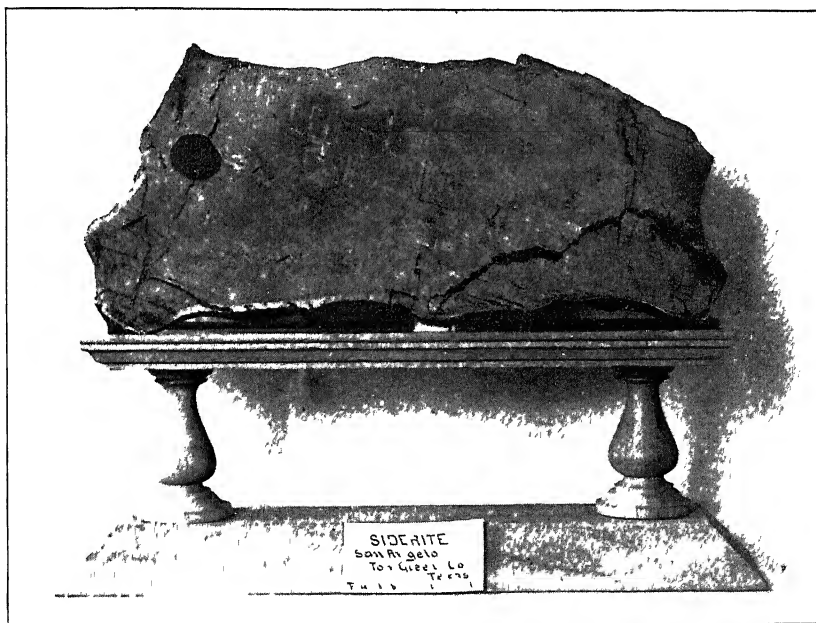
ACCORDING TO DR BREZINA'S SYSTEM OF CLASSIFICATION

ACHONDRITES			CHONDRITES -Continued			OCTAHEDRITES -Continued		
	Localities existing	Localities represented						
Chl	3	3	Ccd	3	3	Og	31	30
Chla	1	1	Ccn	1	1	Ogg	12	12
A	1	1	Cck	11	11	Obk	1	1
Cha	1	1	Ccka	1	1	Obn	1	1
Bu	2	2	Cckb	1	1	Obz	3	3
Am	2	2	Ck	19	18	Obzg	1	1
Ro	3	3	Cka	3	3	Obc	1	1
Eu	6	3	Ckb	3	3	Oh	3	3
She	1	1	Cek	1	1			
Ho	9	9				12	186	183
Hob	1	1	31	317	292	Groups	98% represented	
L	1	1	Groups	92% represented				
12	31	28						
Groups	93% represented		SIDERO-LITES	Localities existing	Localities represented	HEXA-HEDRITE	Localities existing	Localities represented
			M	9	9	H	13	13
			Mg	3	3	Ha	6	6
			Lo	1	1	Hb	1	1
CHONDRITES	Localities existing	Localities represented				3	20	20
Cho	9	8	3	13	13	Groups	100% represented	
Choa	1	1	Groups	100% represented				
Cw	27	25				ATAXITE	Localities existing	Localities represented
Cwa	37	33	LITHO-SIDERITES	Localities existing	Localities represented	Dc	4	4
Cwb	6	6	Si	1	1	Dsh	1	1
Ci	11	10	Pk	9	8	Db	5	5
Cia	25	22	Pi	3	3	Di	3	3
Cib	9	9	Pi	2	2	Dn	5	5
Cg	10	8	Pa	1	1	Ds	7	7
Cga	25	24				Dp	1	1
Cgb	29	28	5	16	15	Dm	1	1
Co	1	1	Groups	93% represented				
Ct	1	1				8	27	27
Cs	6	6	OCTAHE-DRITES	Localities existing	Localities represented	Groups	100% represented	
Csa	1	1	Off	14	14			
U	3	3	Ofv	1	1			
K	9	7	Of	32	31			
Kc	2	2	Om	86	85			
Kca	1	1				SUMMARY		
Cc	48	43				Groups existing	74	
Cca	9	8				Groups represented	74	
Ccb	14	13				Localities existing	610	
						Localities represented	578	
						Proportion of latter	95%	



## VIII SUMMARY OF COLLECTION

Total number of falls and finds	603
(Siderites, 241, Siderolites, 28, Aerolites, 334)	
From North America	229
" South America	31
" Europe	213
" Asia	77
" Africa	27
" Australasia and Sandwich Islands	26
Total weight of entire collection	2,495,429 grammes (= 5,509 pounds)
Average weight of each kind	4,138 grammes (= 9 $\frac{1}{4}$ pounds)
Average weight, counting nothing over 50 kilograms	
to a kind	1,746 grammes (= 3 $\frac{3}{4}$ pounds)
Total number of specimens, large and small, about	1,600



STYLE OF MOUNTING USED IN ENTIRE COLLECTION  
(Pedestals solid mahogany, with celluloid labels)

## ERRATUM.

Two Siderites—Copiapo, No 246, and Hopewell, No 253—were placed by mistake among the Siderolites

## IX ADJUNCT MATERIAL

In addition to the systematic series of Meteorites described in the previous pages, the Ward-Coonley collection contains some further series of representative and illustrating material. These are as follows

<b>Chondri</b>	from Allegan and Bjurböle Aerolites
<b>Cohenite</b>	" Cañon Diablo Siderite
"	" Beaconsfield Siderite
<b>Graphite</b>	" Cosby's Creek Siderite and others
<b>Olivine</b>	" Brenham Siderite, Marjalahti and others
<b>Rhabdite</b>	" Misteca and Descubridora Siderites
"	" Rancho de la Pila Siderite
<b>Schreibersite</b>	" São João Siderite
<b>Taenite</b>	" Magura Siderite
"	" Welland Siderite
<b>Troilite</b>	" Toluca and Bella Roca
"	" Chupaderos, and other Siderites

## MICRO-SECTIONS

An important adjunct to the collections for purposes of Meteorite petrography is a series of microscopic sections of sixty different Aerolites

Meteoric dust collected by Baron Nordenskiöld on snow-fields of Northern Finland

## TERRESTRIAL—NATIVE IRON WITH METEORITE ANALOGIES

	Grammes
<b>Noursoak Peninsula, West Greenland</b>	350
<b>Ovifak, Disko Island, West Greenland</b>	10,816
<b>Canaan, Conn</b>	44
<b>Santa Catherina, Brazil</b>	3,637
<b>Cohenite from Niakornak Iron, West Greenland</b>	2

Specimens of Terrestrial Rocks having analogies of composition or of inner or outer structure allying them in fact or in appearance to Meteorites—pitting, polishing, etc

Unconsumed grains of coarse cannon-powder, worn and pitted by force of air  
Stout branch (short section) cut from tree by fall of the Andover Aerolite

## LIBRARY

The collection is accompanied by Prof Ward's large collection of Meteorite works (books and pamphlets), over eight hundred numbers, with monographs covering about half of all described Meteorites. This is a union of the Bement, Gregory and Siemaschko Meteorite libraries, with that of Mr Ward's compiling

N B—There are several score of duplicate books and pamphlets which will willingly be given in exchange for other Meteorite literature not already in this library

## X CASTS OF METEORITES

## SIDERITES

**Babb's Mills**, Greene County, Tenn Mentioned 1842

Size, 13 x 25 x 90 cm Original weight 136 kilograms

**Bald Eagle**, near Williamsport, Pa Found 1891

Size, 8 x 12 x 22½ cm Original weight 33 kilograms

**Ballinoo**, West Australia Found 1893

Size, 11 x 27 x 34 cm Original weight 429 kilograms

**Bella Roca**, Durango, Mexico Found 1888

Size, 14 x 20 x 34 cm Original weight 33 kilograms

**Bingara**, New South Wales Found 1880

Size, 4 x 4 x 5 cm Original weight 240 grammes

**Braunau**, Hauptmannsdorf, Bohemia Fell July 14, 1847

Size, 14 x 19 x 22 cm Original weight 191 kilograms

**Bugaldi**, New South Wales, Australia Found 1900

Size, 5 x 8 x 13 cm Original weight 2 kilograms

**Cabin Creek**, Johnson Co, Arkansas Fell March 27, 1886

Size, 11 x 38 x 42 cm Original weight 442 kilograms

**Carlton**, Hamilton County, Texas Found 1887

Size, 23 x 33 x 45 cm Original weight 815 kilograms

**Chilcat**, Portage Bay, Chilcat Inlet, Alaska Fell 1871 (?)

Size, 15 x 31½ x 33 cm Original weight 425 kilograms

**Chupaderos**, Chihuahua, Mexico Found 1581

Size, 51 x 154 x 184 cm Original weight 9,289 kilograms

**Chupaderos**, second (largest) mass

Size, 61 x 195 x 256 cm Original weight 1,400 kilograms

(These models, made by the Mexican Government, are of *papier maché*)

**Cleveland (Lea Iron)**, East Tennessee Found 1860

Size, 20 x 40 x 48 cm Original weight 1152 kilograms

**Costilla Peak**, New Mexico Found 1881

Size, 13 x 23 x 31 cm Original weight 353 kilograms

**Franceville**, El Paso County, Colorado Found 1890

Size, 11 x 21 x 23 cm Original weight 183 kilograms

**Glorieta Mountain**, Santa Fé County, New Mexico Found 1884

Size, 16 x 24 x 41 cm Original weight 523 kilograms

**Hex River**, Cape Colony, South Africa Found 1882

Size, 20 x 23 x 50 cm Original weight 64 kilograms

**Joe Wright Mountain**, Independence County, Ark Found 1884

Size, 21 x 21 x 42 cm Original weight 42.5 kilograms

**Juncal**, Atacama, Chili, S A Found 1866

Size, 17 x 18 x 32 cm Original weight 104 kilograms

**Kenton County**, Kentucky Found August, 1889

Size, 20 x 35 x 56 cm Original weight 163 kilograms

**Kokstad**, Griqualand, South Africa Described 1887

Size, 9 x 32 x 66 cm Original weight 42.6 kilograms

**Luis Lopez**, Socorro County, New Mexico Found 1896

Size, 8 x 13 x 19 cm Original weight 6.7 kilograms

**Merceditas**, Chañaral, Atacama, Chili Known 1884

Size, 18 x 20 x 32 cm Original weight 43.4 kilograms

**Morito** (San Gregorio), Chihuahua, Mexico Found 1600

Size, 102 x 122 x 195 cm Original weight 11,560 kilograms

**Mungindi**, Queensland, Australia Found 1897

Size, 17 x 24½ x 39 cm Original weight 28.1 kilograms

**Nejed**, Wadee Banee Khaled, Central Arabia Found 1863

Size, 23 x 28 x 36 cm Original weight 61.6 kilograms

**N'Gourema**, Upper Niger, Soudan, Africa Fell June 15, 1900

Size, 9 x 28 x 57 cm Original weight 37½ kilograms

**Nocoleche**, New South Wales Known 1895

Size, 15 x 23 x 23 cm Original weight 20 kilograms

**Plymouth**, Marshall County, Indiana Found 1893

Size, 7 x 19 x 31 cm Original weight about 14.5 kilograms

**Puquios**, Chili, South America Found 1885

Size, 8 x 13 x 23 cm Original weight 6.5 kilograms

**Roebourne**, West Australia Found 1892

Size, 17 x 34 x 57 cm Original weight 86.8 kilograms

**Rosario**, Olancho, Honduras, Central America Found 1897

Size, 7 x 8 x 12 cm Original weight 2.9 kilograms

**Sarepta**, Saratov, Russia Found 1854

Size, 10 x 20 x 22 cm Original weight 14.3 kilograms

**Scottsville**, Allen County, Kentucky Found 1867

Size, 14 x 16 x 18 cm Original weight 10 kilograms

**Staunton**, Augusta County, Virginia Found 1858

Size 18 x 26 x 44 cm Original weight 68.9 kilograms

**Surprise Springs**, San Bernardino County, Cal Found 1899

Size, 6 x 6½ x 10 cm Original weight 1.5 kilograms

**Thurlow**, Ontario, Canada Found May 12, 1888

Size, 10 x 15 x 15 cm Original weight 5.4 kilograms

**Welland, Ontario, Canada Found 1888**

Size, 7 x 15 x 20 cm Original weight 8 kilograms

**Werchne-Udinsk, Niro River, Siberia Found 1854**

Size, 12 x 16 x 28 cm Original weight 18 5 kilograms

**Wichita County, Brazos River, Texas Found 1836**

Size, 18 x 31 x 42 cm Original weight 145 kilograms

**SIDEROLITES****Breitenbach, Erzgebirge, Bohemia Found 1861**

Size, 12 x 16 x 24 cm Original weight. 10 5 kilograms

**Brenham, Kiowa County, Kansas Found 1885**

Size, 14 x 17 x 20 cm

**Crab Orchard, Rockwood, Tenn Found 1887**

Size, 21 x 24 x 35 cm Original weight 38 5 kilograms

**AEROLITES****Akburpur, Saharanpur, Northwest Provinces, India Fell April 18, 1838**

Size, 9 x 10 x 12 cm Original weight 1 8 kilograms

**Bluff, Fayette County, Texas Found 1878**

Size, 29 x 40 x 46 cm Original weight 146 kilograms

**Bustee, near Goruckpur, India Fell December 2, 1852**

Size, 7 x 11 x 11 cm Original weight 1 3 kilograms

**Butsura, Qutahar Bazaar, Bengal, India Fell May 12, 1861**

Size, 29 x 35 x 40 cm Original weight 13 1 kilograms

**Butsura, Piprassi, Bengal, India Fell May 12, 1861**

Size, 7 x 13 x 25 cm Original weight 5 kilograms

**Butsura, Chireya, Bengal, India Fell May 12, 1861**

Size, 10 x 11½ x 21 cm Original weight 843 grammes

**Butsura, Bulloah, Bengal, India Fell May 12, 1861**

Size, 3 x 5 x 7 cm Original weight 158 grammes

**Butsura, Bengal, India Fell May 12, 1861**

(Five pieces, including the above four, put together, forming one stone)

Size, 29 x 35 x 40 cm Weight 22 kilograms

**De Cewsville, Ontario, Canada Fell January 21, 1887**

Size, 5 x 6 x 7 cm Original weight 340 grammes

**Durala, N W of Kurnal, Punjaub, India Fell February 18, 1815**

Size, 16 x 20 x 25 cm Original weight 13 kilograms

**Farmington, Washington County, Kansas Fell June 25, 1890**

Size, 18 x 43 x 49 cm Original weight 81 6 kilograms

**Goalpara, Assam, India** Found 1868

Size, 7 x 14 x 15 cm

**Homestead, West Liberty, Iowa County, Iowa** Fell February 12, 1875

Size, 18 x 24 x 25 cm

**Karakol, Ajagus, Kirghiz Steppes, Russia** Fell May 9, 1840

Size, 10 x 13 x 15 cm Original weight 3 kilograms

**Khiragurh, S E of Bhurtpur, India** Fell March 28, 1860

Size, 5 x 6 x 7 cm

**Krahenberg, Zweibrucken, Rhenish Bavaria** Fell May 5, 1869

Size, 12 x 21 x 28 cm Original weight 16 5 kilograms

**MacKinney, Collin County, Texas** Fell 1870 (?)

Size, 15 x 16 x 20 cm

**Middlesbrough, Yorkshire, England** Fell March 14, 1881

Size, 9 x 11 x 15½ cm Original weight 1 6 kilograms

**Misshof, Baldon, Courland, Russia** Fell April 10, 1890

Size, 13 x 14 x 17 cm Original weight 5 8 kilograms

**Monte Milone (Pollenza), Macerata, Italy** Fell May 8, 1846

Size, 9 x 12 x 14 cm Original weight 5 kilograms

**Nagy-Divina, near Budetin, Trentschin, Hungary** Fell July 24, 1837

Size, 15 x 23 x 24 cm Original weight 10 5 kilograms

**New Concord, Muskingum County, Ohio** Fell May 1, 1860

Size, 5 x 6 x 8 cm

**Parnallee, Madras, India** Fell February 28, 1857

Size, 23 x 24 x 41 cm Original weight 74 kilograms

**Segowlie, Bengal, India** Fell March 6, 1853

Size, 13 x 15 x 16 cm

**Segowlie, Bengal, India** Fell March 6, 1853

Size, 9 x 9 x 9½ cm

**Segowlie, Bengal India** Fell March 6, 1853

Size, 6 x 8 x 8 cm (The above three are portions of the same stone)

**Segowlie, Bengal, India** Fell March 6, 1853

Size, 4 x 4 x 7 cm

**Wold Cottage, Thwing, Yorkshire, England** Fell Dec 13, 1795

Size, 12 x 17 x 22 cm Original weight 25 5 kilograms

**Yatoor, Nellore, Madras, India** Fell January 23, 1852

Size, 14 x 18 x 20 cm Original weight 13 kilograms

**N B**—Duplicates of these casts of Meteorites may be obtained from Ward's Natural Science Establishment, Rochester, N Y, U S A

## XI MEDALS OF METEORITES

The people of antiquity looked upon the heavenly bodies as the places of abode of gods and beings higher than mankind. Thus it came to pass that they gave divine worship to objects which were seen to fall from the celestial spaces. They built special temples, in which they preserved them with sacred care. They were also displayed for public worship under a priest appointed for the special purpose. These Meteorites received from the early Greeks the name *Betyls* (*Βετύλος*), probably from the earlier Hebraic *Beth-el*, or home of God. In the early centuries—both B C and A D—the habit prevailed in Macedonia, Cyprus, Mallos, Perge, Sidon, Tripolis, Tyrus and many other places to make medals to commemorate the fall of meteorites. Such medals were struck by order of Philip II, Alexander III, Augustus, Caligula, Vespasian, Trajan, Marcus Aurelius, Septimus Severus, Helogabalus, and others. Dr. Aristides Brezina, of Vienna, has given much study to this numismatic meteorology. From him our collection has received a series of sixty casts or replica of these medals. We give below Dr. Brezina's list of these with his prefatory words.

### BETYL COINS

BY DR. ARISTIDES BREZINA.

As the ancients supposed the stars to be the domiciles of gods, falling stars and falling meteorites signified to them the descending of a god or the sending of his image to the earth. These envoys were received with divine honors, embalmed and draped and worshipped in temples built for them. From about 300 B C to 300 A D coins were struck in honor of these divinities by emperors and autonomous cities. In general the image of a stone was first given in naturalistic manner, then by and by became more human-like. Many of these betyl coins represent stones expressly reported to have fallen from heaven. They present many common features, the likeness to obelisks or cones, and later on a half-human likeness or half-iconic form. So it came that similar representations of unknown origin were likewise supposed to represent meteorites in the same manner as among meteorites are recorded those seen to fall and others which had been only found and had been supposed to be meteorites because of their likeness to the former and their difference from terrestrial rocks.

Betyls reported to have fallen from heaven are the Omphalos of Delphi, represented on coins of sixty-five towns and countries, the stone of Emisa (El Gabol) from seven towns, Zeus Katabates of Kyrrboro and Anazarbos, Zeus Keraunios (two towns), stone of Aphrodite Paphia (five towns), Artemis Ephesia (sixty-nine towns), stone of Astarte (eight towns), stones of Athena (seventeen towns). Betyl coins accepted by analogy are The Pyramids of Apollon, the Stones of Zeus Dolichios of Tarsos and of Zeus Kasios of Seleucia, the Simulacres of Artemis Pergia, Samian Hera, Persephone, etc., together 342 towns. Related celestial bodies are the Comets, represented on the coins of Rome and (in modern times) of Silesia.

The present collection of sixty coins with meteorite symbols represent nineteen deities and thirty-seven towns.\*

#### APHRODITE PAPHIA

Cyprus	Julia Domna	Cyprus	Vespasianus, E
"	Caracalla	"	" AR
"	Septimus Severus	Gabala	Macrinus

#### APHRODITE URANIA

Uranopolis	Alexander III	Uranopolis	Autonomous
	Myrina	Autonomous	

#### APOLLO PYRAMIDS

Ambracia	Autonomous	Apollonia	Autonomous
		Megara	Autonomous

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\*The full collection of Betyl medals of Dr. Brezina number several hundred kinds.

## ARTEMIS ANAITIS

Apanea	Autonomous
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## ARTEMIS EPHESIA

Aizanis	Commodus	Asia Provincia	Hadrianus
Ankyra	Gov Faustina, Junior	Philadelphia	Autonomous

## ARTEMIS PERGEA

Asia Provincia	Trojanus	Perga	Autocianus
	Pogla	Antoninus	

## ASTARTE

Byblas	Macrinus	Tyrus	Maesa
Sidon	Elagabalus	"	Trebonianus Gallus
"	Asia Faustina		

## ASTHERA MAGARTIA

Syra	Demetrius III
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## HERA

Hypaepa	Geta	Samos	Caracolla
Zonia Koinon	Marcus Aurelius	"	Marcus Aurelius
Samos	Etrusca	"	Salonina

## PERSEPHONE

Asia Provincia	Hadrianus	Sardis	Caracolla
Sardis	Autonomus	"	Julia Domna
"	Alexander poerus		"

## EL GABAL

Emisa	Antoninus Pius	Rome	Elagalus AV
"	Caracolla	"	" AR
Laodicea	Trebonianus Gallus	"	" AE

## OMPHALUS

Parthia	Tiridates	Syria	Antiochus III
"	Phrastes		
"	Mithradates (Tetradrachma)		
"	" (Drachma)		

## ZEUS DOLICHENOS

Syria	Antiochus VII
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## SAMPLE MEDAL



**EMISA** — A conical stone, carried on a quadriga under four sunshades. Medals struck by Antoninus Pius (138-161 A D) in Emisa, Syria. Afterwards taken to Rome by Elagabalus (218-222), where he struck three silver denarii.

Herodotus says of this Betyl: "A large stone, which on the lower side is round, and above runs gradually to a point. It has nearly the form of a cone, and is of a black color. People say of it in earnest that it fell from Heaven."



## EXPLANATIONS TO PLATES

## PLATE I

Fig 1	<b>Toluca</b> , showing curved octahedral structure	$\frac{1}{4}$ natural size	Fig 6	<b>Mount Stirling</b>	$\frac{1}{3}$ natural size
Fig 2	<b>El Capitan</b>	$\frac{1}{4}$ natural size	Fig 7	<b>Staunton</b>	$\frac{1}{3}$ natural size
Fig 3	<b>Glorieta Mountain</b> , showing curved octahedral structure	$\frac{1}{4}$ natural size	Fig 8	<b>Seneca Falls</b>	$\frac{1}{3}$ natural size
Fig 4	<b>Grand Rapids</b>	$\frac{1}{4}$ natural size	Fig 9	<b>Beaconsfield</b>	$\frac{1}{3}$ natural size
Fig 5	<b>Plymouth</b>	$\frac{1}{4}$ natural size	Fig 10	<b>Welland</b>	$\frac{1}{3}$ natural size
			Fig 11	<b>Hayden Creek</b>	$\frac{1}{3}$ natural size.
			Fig 12	<b>Luis Lopez</b>	$\frac{1}{3}$ natural size

## PLATE II

Fig 1	<b>Waldron Ridge</b>	$\frac{1}{4}$ natural size	Fig 8	<b>Tonganoxie</b>	$\frac{1}{3}$ natural size
Fig 2	<b>Bella Roca</b>	$\frac{1}{4}$ natural size	Fig 9	<b>Wichita Co</b>	$\frac{1}{3}$ natural size
Fig 3	<b>Thurlo</b>	$\frac{1}{4}$ natural size	Fig 10	<b>San Angelo</b>	$\frac{1}{3}$ natural size
Fig 4	<b>Joe Wright Mountain</b>	$\frac{1}{4}$ natural size	Fig 11	<b>Mungindi</b>	$\frac{1}{3}$ natural size
Fig 5	<b>Cañon Diablo</b>	$\frac{1}{4}$ natural size	Fig 12	<b>Bohumlitz</b>	$\frac{1}{3}$ natural size
Fig 6	<b>Saint Francois County</b>	$\frac{1}{4}$ natural size	Fig 13	<b>Merceditas</b>	$\frac{1}{3}$ natural size
Fig 7	<b>Youndegin</b>	$\frac{1}{4}$ natural size			

## PLATE III

Fig 1	<b>Sacramento Mountains</b>	$\frac{1}{4}$ natural size	Fig 6	<b>Augustinowka</b>	$\frac{1}{3}$ natural size
Fig 2	<b>Oroville</b>	$\frac{1}{4}$ natural size	Fig 7	<b>Glorieta</b>	$\frac{1}{3}$ natural size
Fig 3	<b>Oranbourne</b>	$\frac{1}{4}$ natural size	Fig 8	<b>Russel Gulch</b>	$\frac{1}{3}$ natural size
Fig 4	<b>Roebourne</b>	$\frac{1}{4}$ natural size	Fig 9	<b>Thunda</b>	$\frac{1}{3}$ natural size
Fig 5	<b>Necoleche</b>	$\frac{1}{4}$ natural size			

## PLATE IV

Fig 1	<b>Morristown</b>	$\frac{1}{4}$ natural size	Fig 8	<b>Knyahinya</b> , nearly complete stone	$\frac{1}{3}$ natural size
Fig 2	<b>Brenham</b> ("Haviland" Meteorite)	$\frac{1}{4}$ natural size	Fig 9	<b>New Concord</b> , polished face	$\frac{1}{3}$ natural size
Fig 3	<b>Veramin</b>	$\frac{1}{4}$ natural size	Fig 10	<b>New Concord</b> , showing pittings	$\frac{1}{3}$ natural size
Fig 4	<b>Mincy</b>	$\frac{1}{4}$ natural size	Fig 11	<b>Hessle</b> , complete stone	$\frac{1}{3}$ natural size
Fig 5	<b>Medwedewa</b>	$\frac{1}{4}$ natural size			
Fig 6	<b>Homestead</b>	$\frac{1}{4}$ natural size			
Fig 7	<b>Knyahinya</b> , polished face	$\frac{1}{4}$ natural size			

## PLATE V

**Carlton**, Hamilton Co  $\frac{1}{2}$  natural size

## PLATE VI

**Brenham**, Kiowa Co  $\frac{1}{4}$  natural size

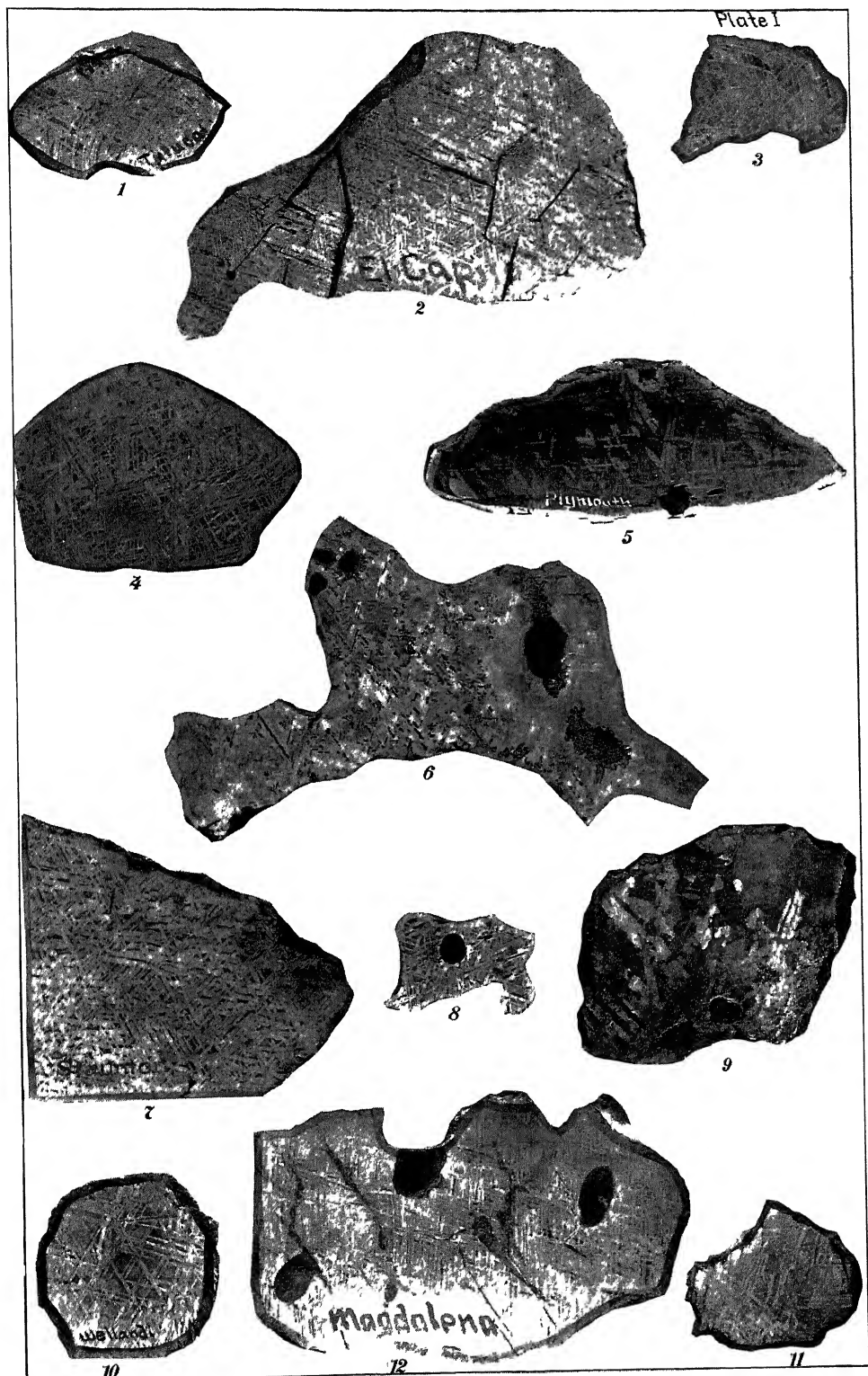
## PLATE VII

**Arispe**  $\frac{1}{4}$  natural size | **Bald Eagle** (slice)  $\frac{3}{4}$  natural size

## PLATE VIII

**Guernavaca**  $\frac{1}{2}$  natural size | **Franceville** (slice)  $\frac{1}{2}$  natural size









1



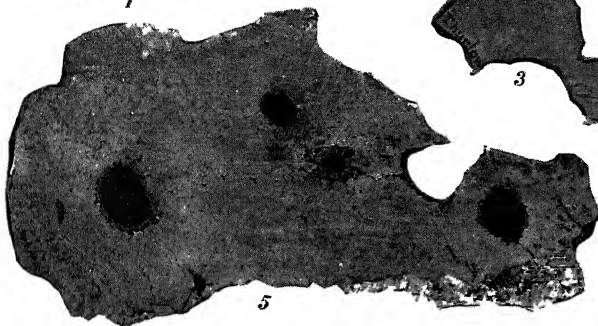
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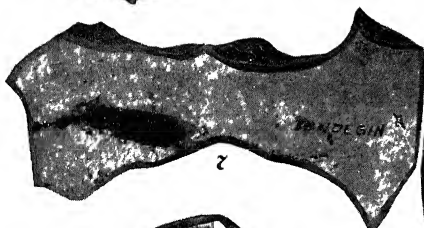
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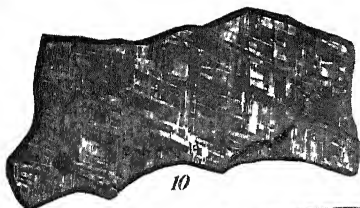
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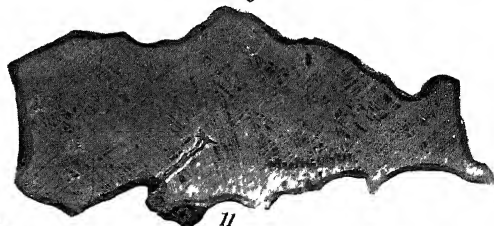
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11

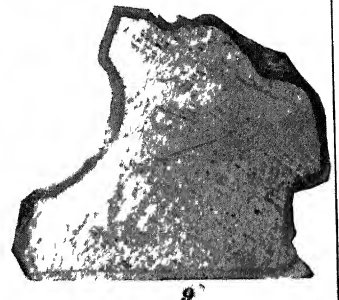
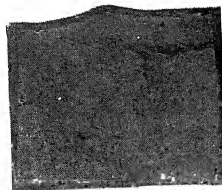
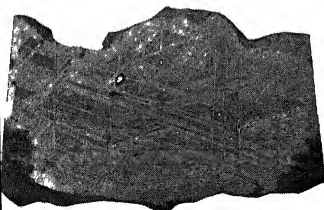
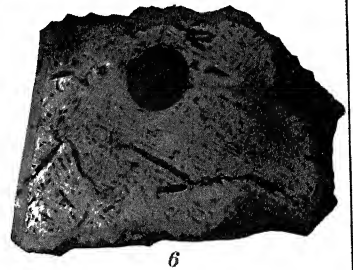
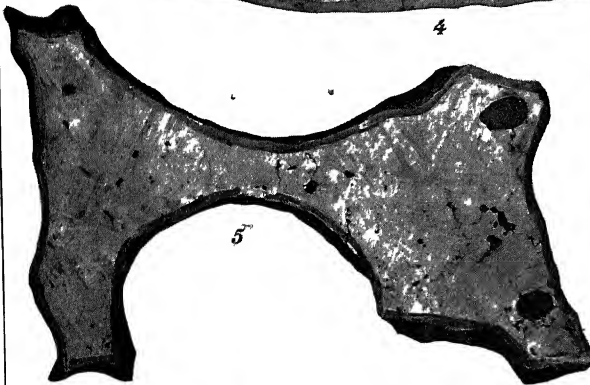
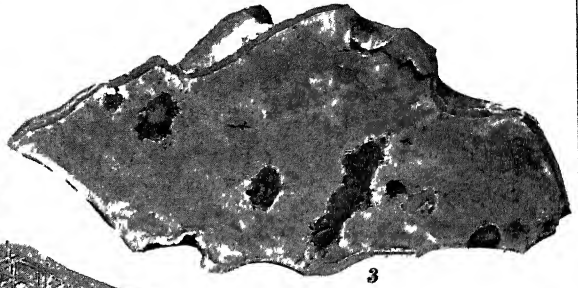
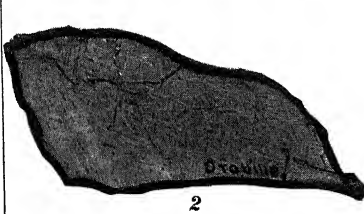
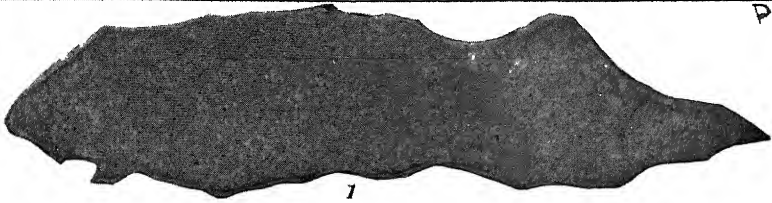


12



13









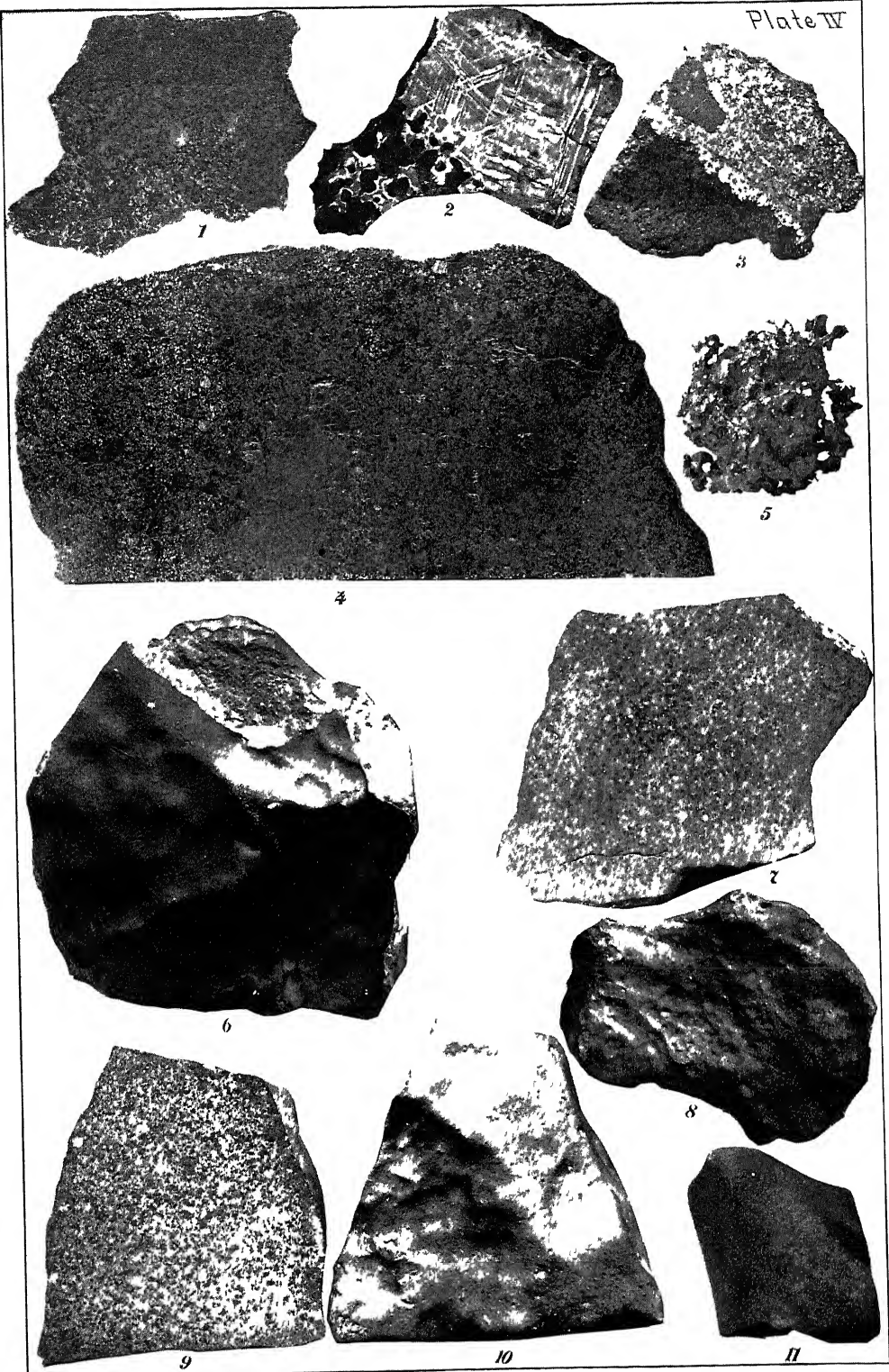


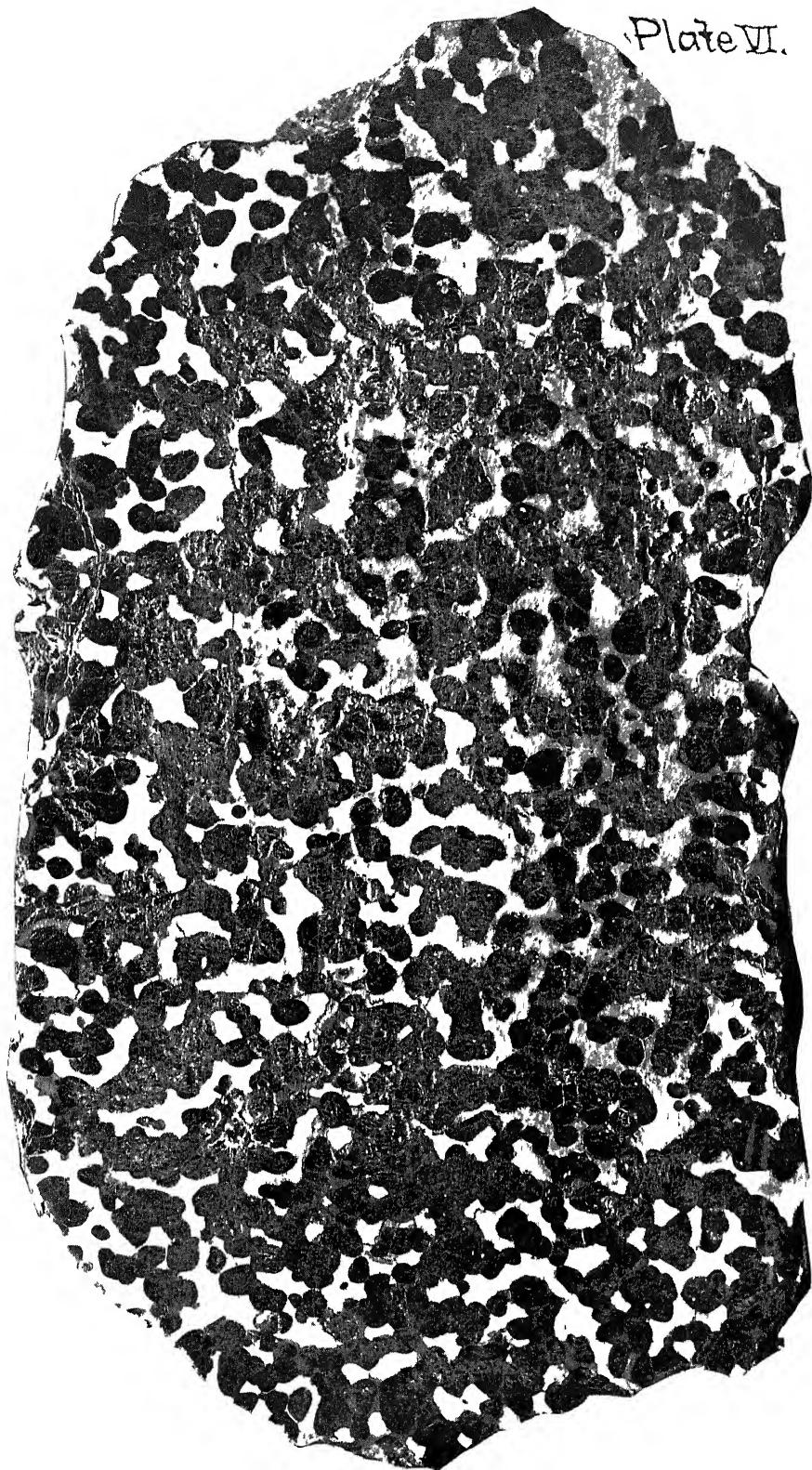


Plate V.

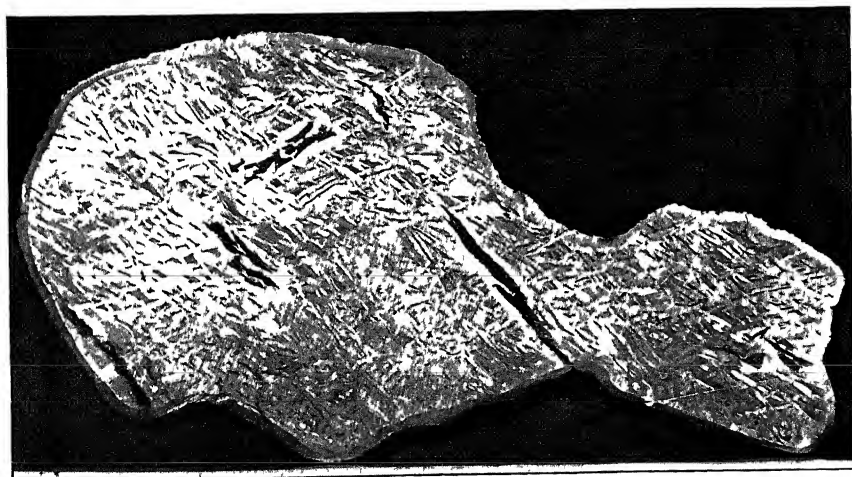
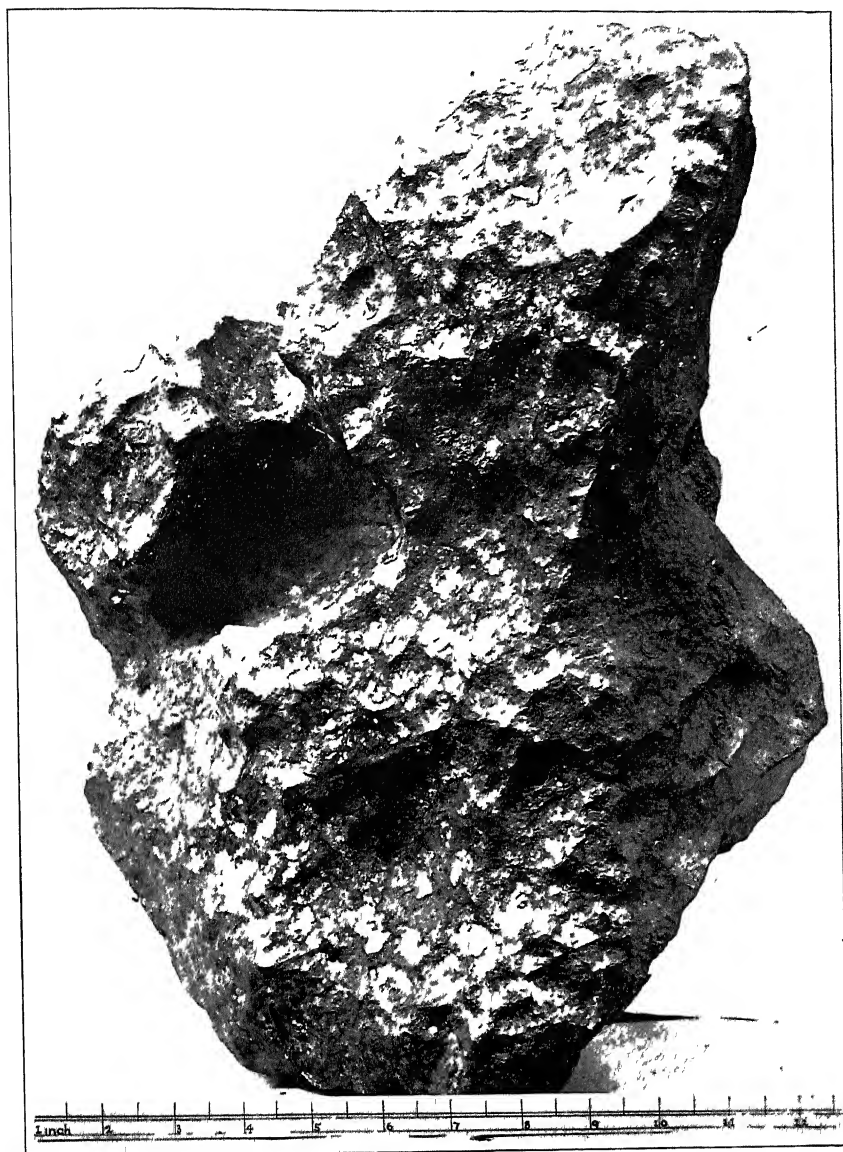




Plate VI.

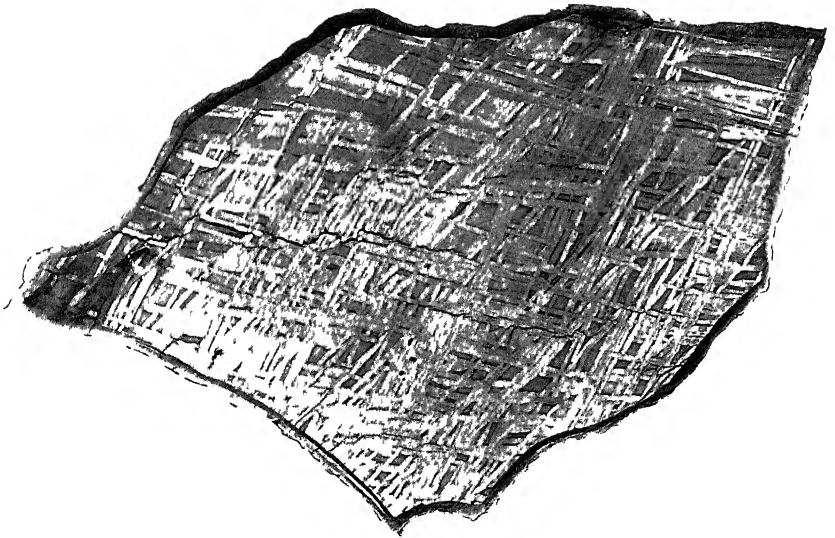










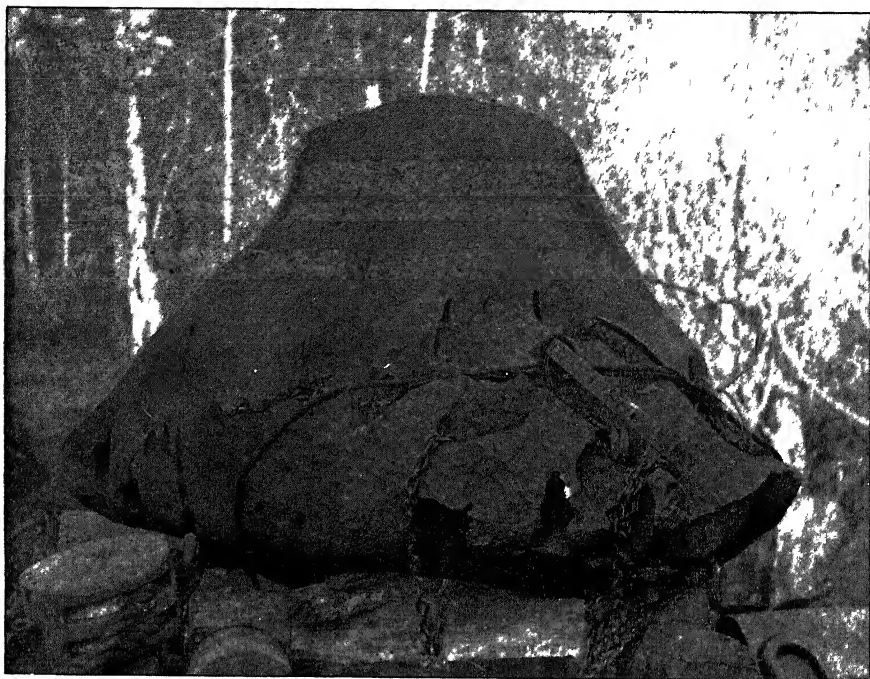




SINGLE SMALL CASE (Nejed, Youndegin, Arispe, &c )

# WILLAMETTE METEORITE

WILLAMETTE, OREGON, U S A



End view of meteorite

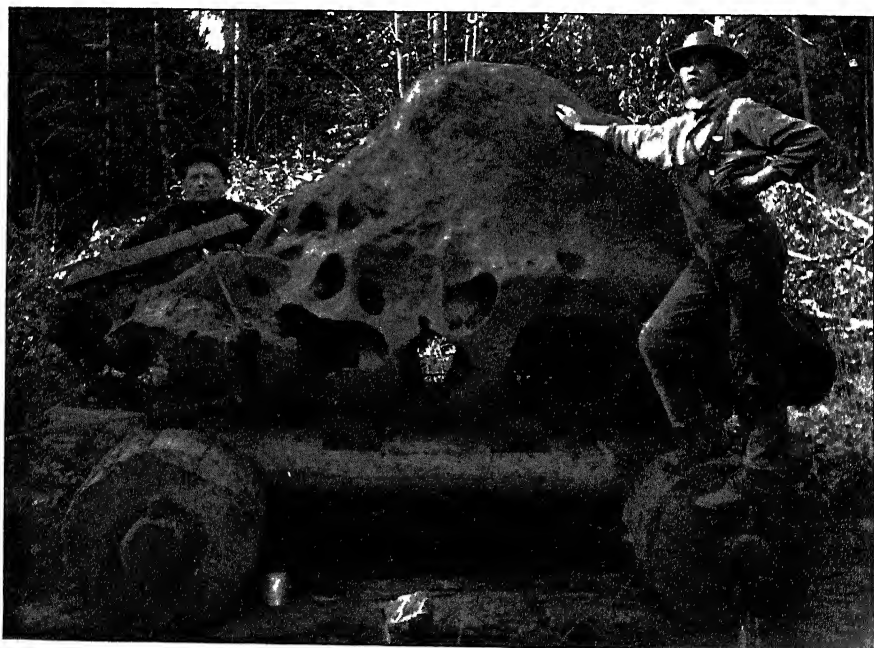


FIG. 1. Side view showing hole piercing the base.

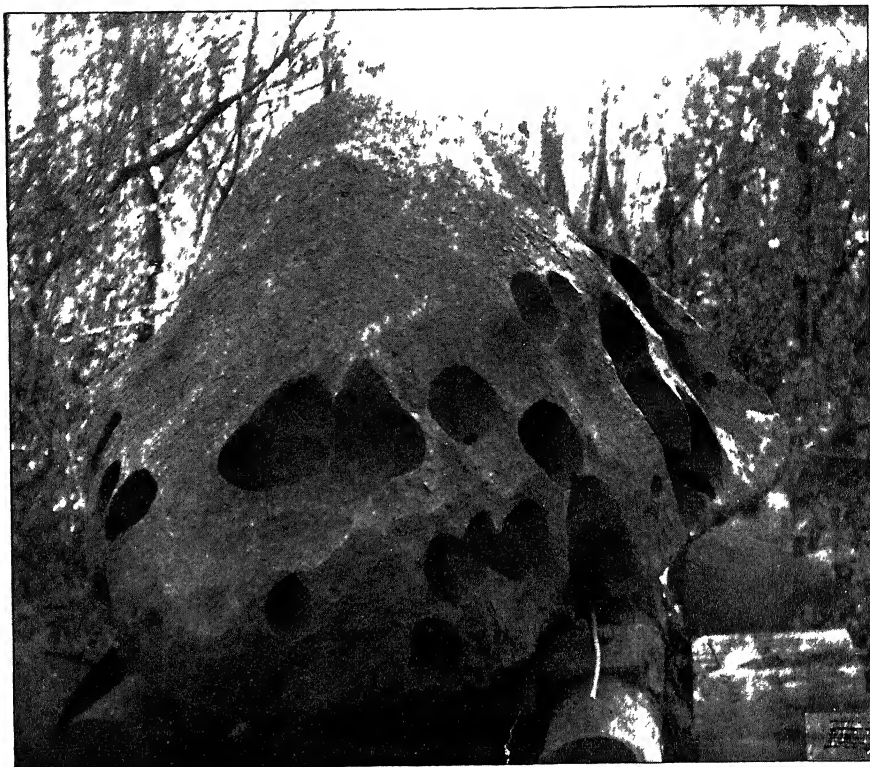


FIG 2 End view showing eroded holes and furrows



FIG 2 South end view meteorite capsized

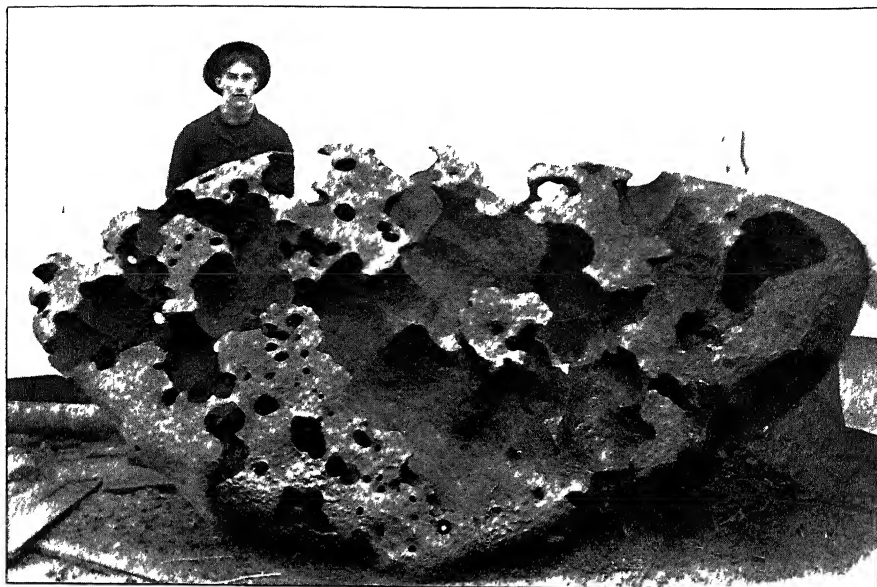


FIG 1 Full view, lower side of meteorite



FIG 2 Full view, lower side of meteorite

Described Proceedings of the Rochester Academy of Science, March 14, 1904,  
BY HENRY A WARD, 620 DIVISION STREET, CHICAGO, ILL

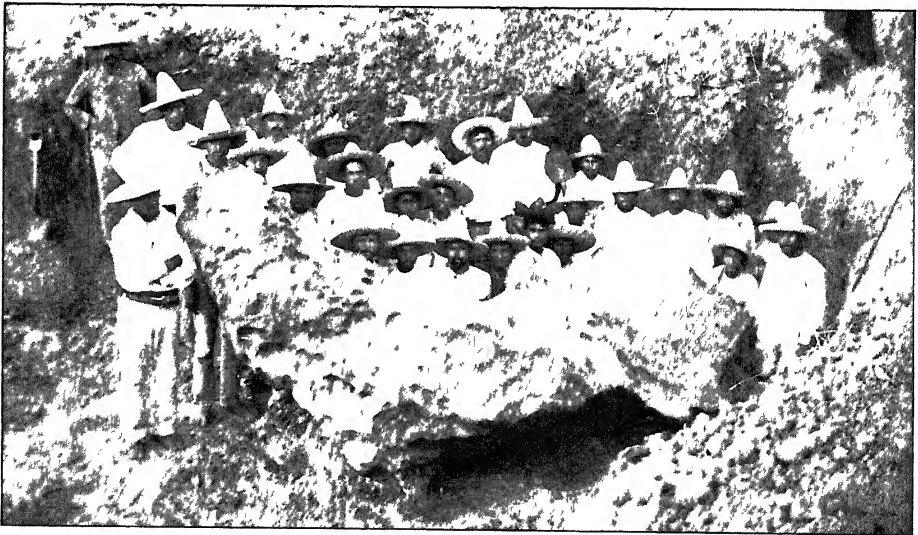


BACUBIRITO METEORITE  
STATE OF SINALOA, MEXICO



H A W

PARTLY EXCAVATED

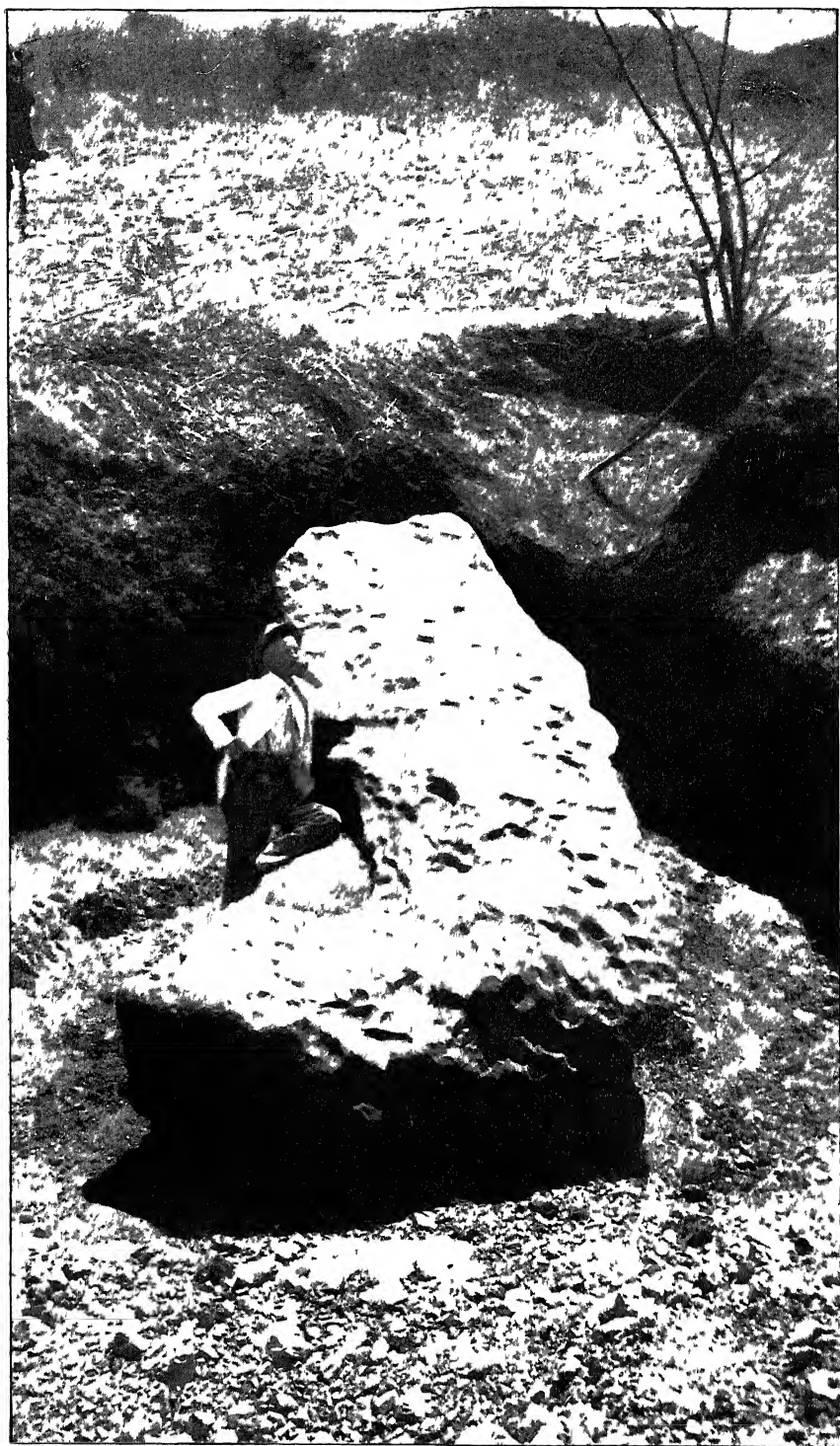


UNEQUAL WEATHERING OF MASS

Described Proceedings of the Rochester Academy of Science, June 24,  
1902, by HENRY A WARD, 620 DIVISION ST , CHICAGO, ILL

Mr Ward seeks to increase his large  
Collection of Meteorites by purchase or  
by exchange For the latter he has many  
duplicates

BACUBIRITO METEORITE



THE METEORITE FINALLY UPENDED